

THE MACDONALD COLLEGE MAGAZINE.

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EDITORIAL

Our predecessor upon taking up his pen to write his last editorial described his feelings as "mixed." That was at the end of the editorial pathway. Standing as we do at the beginning of that arduous road we can find no better

term for our own feelings than that. We will therefore leave them undescribed, save for one—a fixed determination to follow in the footsteps of the previous Editor. In another part of these pages will be found a tribute to

him. If only there were more of these men at College how much more easily every activity would progress.

In the recent public speaking contest we heard of two types of men—the “Lifters” and the “Leaners.” The need for “Lifters” at Macdonald is great—far greater than at most institutions of older foundation or of narrower aims. Look around you and notice the “Lifters” and the “Leaners.” What is the proportion? Many and difficult are the offices which must be capably held to make possible and prosperous that College life which is the magnificent privilege of each one of us. What an enjoyable existence we should have at Macdonald, without athletics, without literary societies, debates and concerts, without the rink and without interests! It is the “Lifters” who give us these; giving their time and energy to give the lovely life the lazy “Leaners” lead.

Try lifting! Stop leaning! Do something! However small it may be, if you do it to the best of your ability you are as worthy a “Lifter” as was Atlas. At present, the College is our little world. Don’t leave it in the hands of a few self-sacrificing Atlases to support that world—at the best the balance will be bad—but let each one of us undertake to raise our own small portion, let us lift with all our might, and we will raise this College world of ours on a steadfast foundation to a height which can be gained no other way.

* * *

A few evenings before the intensely interesting Public Speaking Contest, held in the Assembly hall, we were listening to an ardent, although quite unofficial, discussion on the subject of the influx of rural populations—especially the young men—into the cities. As usual

with such discussions, much that was true was said, but little was decided. On thinking over the Public Speaking Contest, it seemed to us that in those six speeches the reasons and the remedies had both been put before us and that we—the Macdonald College students—were the one audience in the Dominion of Canada to whom those speeches most closely applied.

We would divide those six speeches into two groups. Firstly, the ones on “Under Drainage,” “Winter Wheat Growing” and “Co-operation,” and, secondly, those on “Farming as a Profession,” “Good Roads” and “The Farmer and Politics.” The first group was a plea for the prosperity of the rural population, the second for their enlightenment.

The first of these two groups is mainly technical, and it is of the second that we wish to treat—very shortly—in these pages.

The question of roads which was treated chiefly from the standpoint of prosperity, is, in our opinion, more important in its effects on the general enlightenment. The set-back which our so-called roads have given to mental co-operation is enormous, and it is mental co-operation that is going to raise the rural standard. Such co-operation is seen at all the Agricultural Colleges and at its best at Macdonald College. What the country needs is continuous and frequent inter-communication between its individuals, friendly sociability, the discussion of events, the comparison of the problems of the different individuals, and the far more frequent opportunities to listen to the views of men who are experts in these many problems. Only good roads and constant intercourse can give this, and it will soon result in the realization

that these problems are common to all and not merely individual ones. When this state of affairs is brought about, and not till then, the farmer will take his rightful position in the world of politics.

In the little discussion which we mentioned before, it was put forward that the state of politics was such that the less the farmer had to do with them the better it would be for the farmer. That idea—an entirely erroneous one—is held by many. It is not till the man who is disgusted with the present state of politics begins to take his part in them that they will reach the standard that he desires. The farmer—the

steady man, independent of the influence of his master, for he has none—the property owner—the farmer, we repeat, is the class which will revolutionize politics when he dominates them. It needs only a slight effort on the part of this class—but a continuous and concerted one—to counteract the frantic machinations of the great corporations and their satellites. Then will the farmer gain his undoubted rights, then will the farmer spend the sums to which he chiefly contributes, and then will farming really become the profession—prosperous and enlightened—that we all desire to see it. Therefore “Lift,” don’t “Lean.”

Macdonald and McGill.



AM asked to write for the MACDONALD COLLEGE MAGAZINE a short article on the relations of the College to the University. Macdonald is part of McGill; so much is obvious. It is not merely an affiliated College, like the one at Vancouver. All the grounds and buildings of Macdonald College and every dollar of its endowment fund belong just as much to the University Board of Governors, who are its Trustees, as the Royal Victoria College in Montreal or even McGill College itself.

In the business world this is the day of combines and trusts, and education seeks to profit by the adoption of corresponding methods where they will be beneficial, while eliminating—let us hope—any attendant and incidental disadvantages. There is, or ought to be, no selfishness or greed about an educational combine: its one and only aim is the benefit of the consumer. Macdonald did not spring into being as the rival of McGill, but to supplement it. Any separation of the two would have meant a division of the educational interests of the English-speaking population of the Province of Quebec, which it is the primary aim of both institutions to serve, and it is the men who have studied those interests most carefully, like Sir William Macdonald, who realize most fully how much they stand in need, not of division, but of concentration, co-operation, solidarity.

The story of the growth and development of universities forms a chapter in the history of evolution. There was a time when they prepared only for what were called the learned professions,—

Law, Medicine and the Church. Some of them, owing, no doubt, mainly to local circumstances, have never got much further than that. The first inroad on the traditional curriculum was made when the teaching of natural science was introduced. A still greater departure took place when the University became interested in the applications of science, and joined to itself schools of engineering and technology, which might, of course, have been founded as separate institutions, but only at some considerable risk of dislocation and overlapping. To-day it is an accepted maxim of academic policy that the University ought to seek to associate itself with every department of public usefulness that has an underlying basis of scientific work.

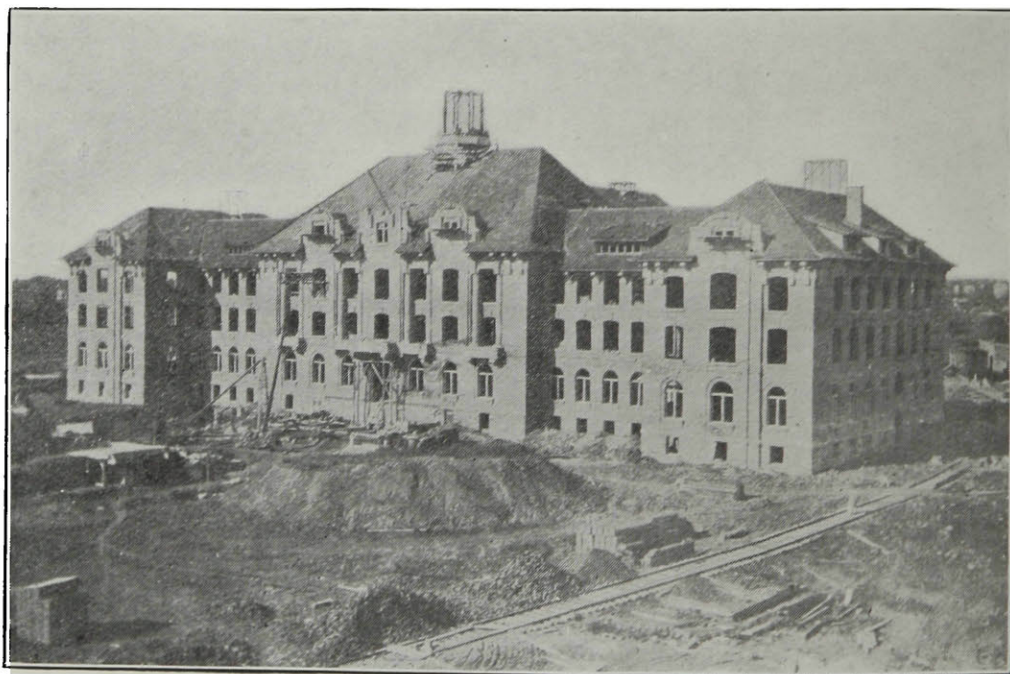
Agriculture is, or ought to be, one of the most fundamental of the sciences: rather, it may be said to include many sciences in itself. That is why it has found a place in the University constitution. It was the knowledge of what is going on elsewhere that led the far-sighted founder of the new institution at Ste. Anne de Bellevue to join Macdonald to McGill in bonds that cannot be broken, with equal benefit to both. The University has obtained a most enviable opportunity of extending its sphere of practical usefulness to the community, while the College, on its side, gains the "uplift" that comes to all technical work—whether agriculture, engineering, or dentistry—by association with an institution professing wider aims.

A purely practical and professional school, cut off from other intellectual interests, would have been apt to

become stereotyped on a lower level, and to lose much of its capacity for vigorous growth.

It is significant in this connection, that in Germany not a single agricultural institute (with the exception of one founded nearly a century ago) has been established except in relation to the university of the district. And in England, the reconstituted University of London is seeking to relate itself to agriculture precisely as it does to other technical and scientific branches, such as medicine, engineering and law. Every-

the university might be well advised to leave it alone. The university does not seek to affiliate the engineering shop, for example,—though the practical work of the engineering shop may be very closely dependent on the principles which the university expounds in its lecture rooms and illustrates in its laboratories. Without any foolish disparagement of the practical, it may be held that it is the scientific side of the agricultural college that is of the greatest importance to agriculture as an industry. And it is pre-



MACDONALD IN THE MAKING.

thing, of course, depends on the surrounding circumstances. If the agricultural school were to confine its aim to being merely of practical service to farmers in their actual work, and if the local university had nothing in its curriculum except classics and mathematics, a union between the two might well turn out to have been against the interests of both. But it is seldom the case now-a-days that the agricultural college limits itself merely to the practical. If that were the case,

cisely here that the connection between the college and the university is found to be most natural and most necessary,—on the ground of common work in the field of scientific research and investigation. Apart from the short courses which are so valuable a feature of the instruction given by the college—and which are very much on the same level as the Extension Lectures and the Summer Meetings of the modern university—the really methodical part of its educational operations begins with

the Two Years' Course for the diploma and issues in the degree of Bachelor of Science conferred at the close of a four years' curriculum. The best product of the agricultural college that aims at anything beyond the practical is admittedly the expert and the teacher. To show how inevitably he must connect with the university, let me quote from a paper drafted a few years ago by the Professor of Agriculture at Cambridge, England:

"Our Universities train teachers for colleges and technical schools, and unless our agricultural colleges are to take an inferior position in the educational system of the country they too must draw their teachers from the universities. The existence of a Department of Agriculture in Cambridge is the best guarantee that teachers of the right class (men who have taken an honour degree and have subsequently devoted themselves to the study of Agriculture) will be prepared for the profession of teaching the subject."

And again: "Nothing is more necessary for the healthy growth of our system of agricultural education and for the material improvement of agriculture than that we should succeed in enlisting recruits for work in agricultural science."

The old universities are not popularly supposed to care for much outside the traditional curriculum, and it may, therefore, be of interest to recall in this connection the words used by the late King Edward when he visited the Cambridge School of Agriculture in 1904: "I am very glad," he said, "to know of the educational work in connection with the great industry of agriculture which you have undertaken. In common with most branches of

industry, agriculture has in modern times come to depend for its success and extension upon the unremitting application to it of the results of scientific investigation. No greater service can be rendered to this ancient industry than to furnish it with the means of research and instruction which are essential in order that labour may be directed in profitable channels."

I have spoken of what is being done on the other side of the Atlantic because many people wrongly imagine that things over there are very far behind. But we may look nearer home. Without taking the United States into account in the meantime, we have before us the shining example of Guelph and Toronto. When the Mosely Commission visited the American continent, it recorded its deliberate judgment that it had seen nothing better anywhere than the agricultural school at Guelph and the engineering school at McGill. Macdonald as yet was not. The only trouble about Guelph, from the point of view of this paper, is that it is perhaps too far away from Toronto. The ideal is to have the agricultural college close to a large city and still to have country conditions. One of the greatest services which Dr. Robertson rendered in connection with his pioneer work for Macdonald College was his choice of the site. St. Anne is near to Montreal, and with the growth and extension of the city it will come nearer still.

So much for the general argument, which applies to agriculture as to everything else, that it is expedient and advantageous to relate the work of the technical and professional school to the wider operations of the university. Failure to connect would inevitably imply isolation and detach-

ment, and might result in an unnecessarily contracted outlook on the part of both teachers and students.

But agriculture is not everything, even at Macdonald. It must not be forgotten that a very essential part of the operations of the College is the School for Teachers. Here McGill and Macdonald are old friends. For fifty years McGill acted as the agent of the Provincial Government in the matter of training teachers in the City of Montreal. And even now they have not all gone out to Ste. Anne de Bellevue. While it has been considered wise and well, in the interests mainly of our rural schools, to concentrate the facilities for elementary training there, it must not be forgotten that McGill also trains teachers in the city, and that it takes Macdonald and McGill together to make up a complete training college, with the Professor of Education and the Head of the School for Teachers in joint charge and control.

I have left myself no space to speak of the Department of Household Science, though every one knows how important it is both for what the College Announcement calls the "farming community" and for the teachers in rural schools. I have often had ocular demonstration of the fact that there is nothing at Macdonald that interests visitors more,—including the "mere man". It is gratifying to know that, in spite of changes in the staff and other difficulties, the work in domestic science is going forward prosperously.

There is one point in regard to which Macdonald is the envy of McGill. It is a residential College. So far only the women students have been provided for in this way at McGill,—in the Royal Victoria College: the men must still, for the most part, have recourse to

boarding-houses. But a time will come. We ought to have four or five residence for men as close as possible to the McGill campus. The success of the somewhat daring experiment that has been carried out at Macdonald makes us all the more eager for more of the same thing at McGill. There is nothing like a common life for stimulating the sense of corporate existence,—the feeling of being members all of one body. What is needed next at Macdonald is, in my judgment, a teaching department of music, with a teacher in residence whose influence and inspiration may permeate every department of your college life. Music is one of the strongest links in the chain that binds. As regards residence, conditions in the city are, of course, somewhat different. We shall never have at McGill the beautiful sight that greets the eye of visitors to Macdonald when the whole College—men and women together—assembles in the Dining Hall of the Women's Building for the common meal. But we shall have our Convocation Hall and our Grand Organ all right enough before another hundred years are over!

Meanwhile we can go out to Macdonald,

"I have been there and still would go,
'Tis like a little Heaven below!"

There are some whose official duties take them out there from time to time. There are others who would like to go. Of course, we are all greatly occupied, in both centres, with our own work. But there cannot be too much coming and going between Macdonald and McGill. It is good for both of us that we should be made to feel that we are members one of another. No doubt athletic sports will help to

bring both student bodies together: even for the women generous rivalry in basket ball has already done much. And there are other opportunities of intercourse, formal and informal. But above everything else will come the wish and desire in the heart of every individual among us to cherish and develop the feeling of unity. There need be no jealousies or misunderstandings. The University does not wish to over-ride the College: the generous measure of "Home Rule" provided in the Deed of Constitution eliminated from the start any danger from that side. And so far as I have been able to observe, the officials of the University have never shown any desire to exalt themselves above those of the College. On the other hand, the College realizes the privileges and responsibilities of partnership in a University constitution. As a College of McGill

it ranks higher than it could have done, to begin with, as an independent institution.

May the University and the College go on prospering together in amiable union. It is a great privilege for all of us who have seen the development that the last few years have brought to have been associated with the generous donor who has done so much for education in the Province of Quebec, and who has always had so deeply at heart the interests of our rural population. Even before Macdonald College was thought of I used to say that, just as Augustus found Rome of brick and left it of marble, so by his great science buildings, Sir William Macdonald was gradually transforming McGill into Macdonald. And now there is Macdonald itself,—a valuable and highly appreciated portion of Greater McGill!

W. PETERSON.

A Demonstration in Road-Making.



It is undeniable that the bad state of our rural roads is a serious obstacle to the progress of agriculture."

This passage in the Speech from the Throne at the recent opening of the Provincial Legislature shews that attention is being given to the roads throughout the province; and the statements which follow the quoted passage point toward an increase in the assistance already given in the Province by the Government. This assistance consists of the payment by the Government of a large proportion of the expense of macadamizing roads. Hitherto the municipalities have not availed themselves very much of this help, but it is to be hoped that whenever the Government increases its subsidies (if that be the method it means to adopt), more work of improvement will be done.

The farmer needs good roads. During the late fall, and more especially during the spring a farmer's greatest concern is the state of the roads. And small wonder. When the wagon which takes the milk to the factory or to the train, or that which takes the family to church, is buried to the axle in mud, there is much cause for concern.

Think of the saving which good roads would effect in time, horse-flesh, vehicles, and temper! Think of the greater facilities for social intercourse! Think how much more easily the children could get to school. Let us hope that progress will be made abundantly and rapidly.

Mr. James Morgan of Stoneycroft Stock Farm, Ste. Anne de Bellevue, has done some considerable work in

roadmaking on his property near the College. His work has been so appreciated by his neighbours that many of them have asked him to build roads for them. Any one who has seen Mr. Morgan's roads will be convinced of the good they do to the localities as better routes of traffic, and to the province as a demonstration.

Mr. Morgan was supplied by the Sawyer & Massey Company, of Hamilton, Ont., with a road roller, a water cart, an engine and a stone crusher. As long as he could buy loose stone of good quality he did so, but when the supply ran out he opened a quarry. The stone crusher was fitted with a sifter which graded the stones into four sizes:— $\frac{1}{2}$ ", 1", $1\frac{1}{2}$ ", and larger.

The roadmaking was done on old earth roads and the method followed was somewhat as follows: The road-sides were ploughed and the earth graded into the middle. All hollows were filled, stumps and boulders were removed and the 12 ton steam roller packed the earth hard. A layer of the largest sized stones was put on top of this, 6" deep in the middle and running down to 3" deep at the edges. After watering and rolling this a 3" layer of the next grade of stone was laid and rolled. On top of this again one inch of the 1" stone was put, the whole being covered by 1" of the smallest size. While rolling the various grades a copious supply of water was put on by the water cart. The road was made so hard that no sinking was visible under the roller when it was finished. In some places, on account of the softness of the land, stone had to be laid to the depth of $1\frac{1}{2}$ feet.

As it was necessary to drain the roads tile drains were laid, $2\frac{1}{2}$ -3 feet under the surface, and given a fall of 2" in 100'. No culverts have so far been necessary in these operations, but it is suggested that a tile 18" or 24" (according to the water flow) will be satisfactory if put in properly.

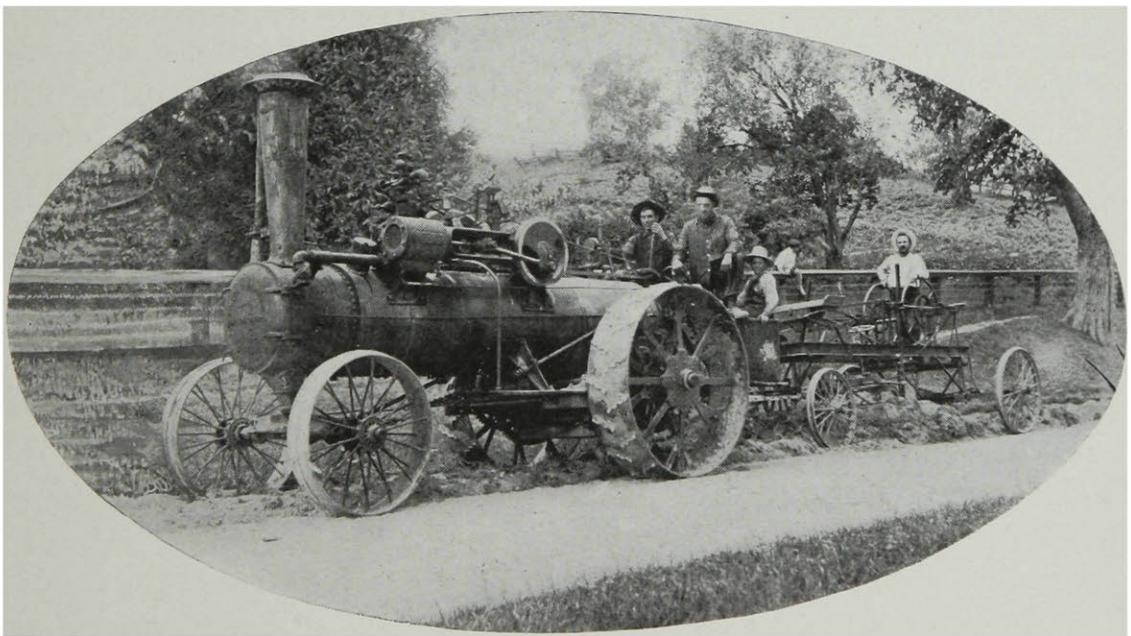
The result of this work is a stretch of good hard dry road. The water in spring will run off quickly, there being no surface mud to hold it, and the drain will carry it away.

Representatives of municipalities, farmers and others, will do well to visit this piece of work. As soon as the snow

disappears they will be able to see the past season's work, and very soon afterwards the next season's operations will be begun, so that visitors will have an opportunity of seeing the whole road-making plant in action. It is located on the river road, about a mile east of the College.

Much credit is due to Mr. Morgan for his demonstration to his neighbours and others who may be interested, and the writer thanks him for his courtesy in giving the information which is here put before the readers of this Magazine.

W. L.



ROAD-MAKING MACHINERY.

The Labour Problem.



THE solution of the labour problem upon the farms of this Province is most difficult to solve. Lack of labour is proving a serious handicap to the farming interests of all our farmers, who, not being able to obtain men, are unable to bring about the practice of intensive methods upon the farm. It is often claimed that the farmer will not pay decent wages, treat his men with respect, or grant them short enough hours. In this there is a great deal of truth, and we cannot expect a man who has within him any spirit of independence to accept such a slavish position. In justice to all, however, it must be stated that many farmers do pay good wages and treat their men like members of the family. Even under such conditions as these, it is almost impossible to obtain men. One reason is because labouring men, as a rule, regard farm labour and farmers as an occupation and individuals which should only be resorted to when all else fails. The greatest reason, however, is because there are not the men to be had. The stringency of labour has been felt in every company or corporation where labourers are wanted in large numbers. The progress of the times has outrun

the supply of labour and the farmer has been one of the sufferers.

To him, however, a measure of relief is now possible, should he wish to avail himself of it. The Salvation Army last year launched a campaign for the bringing to Canada of 10,000 farm labourers and domestics, who are all of British blood. These persons were all subjected to examination and accepted from over 100,000 applications. This shows the severity of selection and the character of the persons brought out. They are of a highly desirable class and are selected by experienced Canadian agents. Last year's venture proved so successful, that the Army is preparing to bring out 10,000 more this spring to help upon our farms. Those farmers who desire good labourers of their own blood and who are willing to pay fair wages and grant decent hours will do well to consider this proposition.

All those desirous of securing help for next Spring should at once get into touch with the Salvation Army officials as the demand is likely to exceed the supply. For further information and application forms write Major Hay, 24 Alexander Street, Montreal, Que., who will be pleased to answer all enquiries.

J. E. M.



Poultry Manures, their Treatment and Use.

By WILLIAM P. BROOKS, of the Massachusetts Agricultural Experiment Station.

THE average night droppings of the medium breeds of fowls, according to determinations made, must amount to 40 pounds per fowl per year. If the plant food in a ton of average fresh poultry manure be purchased at current prices in fertilizers, the outlay would amount to nearly \$7.50. Observations and experiments indicate that as poultry manure is frequently handled it suffers a loss of one-half or more of the nitrogen it contains when voided before it reaches the land. It is the aim of this article to show how that loss may be prevented.

Poultry manures are particularly rich in nitrogen and their general characteristics are such that they readily decompose. As a result of decomposition the manure heats and there is a rapid and large loss of moisture and of ammonia.

METHODS OF PRESERVATION.

The free use of fine dry loam, or the admixture of such materials as kainit, acid phosphate, muriate of potash or land plaster, or of a combination of some of these will effectively prevent loss

of nitrogen. Loam alone must be used in quantities so large as considerably to increase cost of handling. Either kainit, muriate of potash or acid phosphate alone is effective, but the mixture, especially with the first, holds the material too moist for convenient handling. Plaster is somewhat less sure in its action, and if largely used the mixture may form hard, dry cakes. Kiln dried pine sawdust has been successfully used with kainit by the Marine Experiment Station.

The writer recommends fine, very dry earth in moderate quantities on the dropping boards and daily removal. To each 100 pounds of fresh droppings, add a mixture made up as follows:

Kainit.....	15 lbs.
Acid phosphate...	12 lbs.
Land plaster.....	10 lbs.

Sprinkle this in proper proportion over each lot of fresh material as it is added to the accumulating stock, and mix before use.

Such a mixture will give a combination of fertilizer elements in proportions well suited for most crops.

WHAT NOT TO DO.

The frequency with which correspondents inquire as to the stability of wood ashes, coal ashes or lime for preserving poultry manures leads me to caution against mixing with these materials. All of them are likely to increase the loss of nitrogen. Wood ashes may be used as a fertilizer in connection with poultry manure, but if so used should be applied by themselves, and preferably before applying the poultry manure.

THE USE OF POULTRY MANURE.

The fact should be kept in mind when planning for the use of poultry manure, that its constituents are quickly available. It should be remembered, moreover, that the material is naturally so strong that in close contact with either seeds, foliage, or delicate rootlets in large quantities, it will burn and injure. Such a mixture as has just been recommended would usually best be used by spreading

either broadcast or very widely in the hill or drill. It should give excellent results for mowings, lawns, and in the garden.

If to be used for potatoes, the writer would prefer using 4 pounds of high grade sulphate of potash in place of the 15 pounds of kainit.

The quantity of poultry manure applied must naturally be varied with soils and crops, but it should be remembered that such manures well preserved, or such mixtures of poultry manures and chemicals as have been suggested, are much stronger and richer than ordinary manures and should be used in smaller quantities. From about one and one-half to two and one-half ($1\frac{1}{2}$ to $2\frac{1}{2}$) tons per acre will be the usual range in quantity. It should be remembered that kainit, acid phosphate and land plaster are in themselves fertilizers, and that in mixtures with poultry manures their usual fertilizer action is not at all diminished.



MR. FIXTER AND HIS CORN

Soil Fertility.



ANADA has a rich inheritance in her matchless forests, her unrivalled fisheries, and her inexhaustible mines. But she has an inheritance richer than all these, in her fertile soil, which will forever remain the foundation of her greatness. Should greed and ignorance ruin her mighty forests, deplete her fisheries, and exhaust her mines, yet with the fertility of her soil unimpaired, Canada would still take her place among the proudest of the nations.

In its widest sense soil fertility has reference to all those factors of soil that enter into crop production—heat, sunlight, moisture, air, chemical and bacterial agents, and plant food. It will be unnecessary to consider these singly. It will be found sufficient to discuss the whole question of soil fertility under the following heads—Drainage, Cultivation, Humus, and Plant Food.

DRAINAGE.

Many of our best soils are unproductive on account of an excess of moisture. In such cases drainage produces a wonderful transformation.

The soil becomes warmer, sweeter, and more friable. As the water drains away the air takes its place, and chemical and bacterial activities are set in motion. Nitrogen, phosphoric acid, and potash are set free, and become food for plants. The water-table, as it is called, should not be nearer to the surface than $3\frac{1}{2}$ to 4 ft. during the growing season.

CULTIVATION.

Cultivation may be considered under two heads—that which precedes planting and that which follows it. The importance of a well prepared seed bed can scarcely be over-estimated. The soil

should be worked till it is as mellow as a well worked garden. Soil congenial to plant growth must be porous, so as to allow the air to circulate among its particles, and to facilitate the passage of the young rootlets through it. It must be thoroughly pulverised in order that it may readily absorb and retain plant food and water.

The cultivation that follows planting is also very important. It has a three-fold object—the aeration of the soil, the conservation of moisture, and the destruction of weeds. It consists in stirring the surface of the soil to a depth of about an inch at intervals of 10 days, and also after each rain.

HUMUS.

Humus in many respects is the most important factor in crop production. With it the poorest land is rich, without it the richest land is poor. Humus warms and sweetens the soil. Humus lightens the heavy clay soil, and gives needed firmness to the sandy soil. Humus awakens chemical and bacterial activities. Humus not only yields up rich supplies of plant food—especially nitrogen, but it unlocks the dormant plant food already in the soil. Humus, through its sponge-like character, absorbs water in times of plenty, and doles it out in times of drought.

The great superiority of stable manure over chemical manures is due to its very large content of humus. The fertility of worn out fields can be quickly restored by heavy applications of stable manure.

There are three ways of keeping up this supply of humus—short crop rotations, in which grass, especially clover, has a prominent place, applications of stable manure, and green manures.

PLANT-FOOD.

Water is the limiting factor in crop production. Not only does water constitute more than half the substance of plants, but it is the vehicle through which plant food is carried from the soil to all parts of the plant. Control of this moisture has already been fully considered.

In addition to water, plants take from the soil at least seven elements of plant-food—Nitrogen, Phosphorus, Potassium, Calcium, Magnesium, Sulphur and Iron. Commercial manures are said to be complete when they contain nitrogen, phosphoric acid and potash. These manures are complete only in the sense of supplying what the soil lacks. The soil is supposed to,

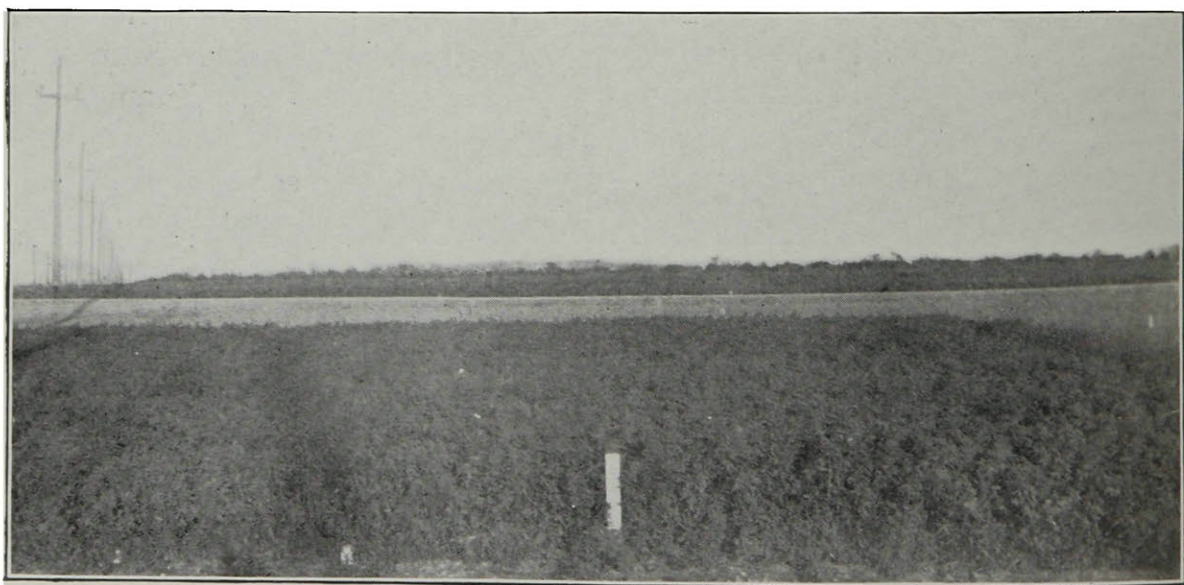
and usually does, contain the rest in quantities sufficient for the needs of plants.

Nitrogen is at once the most costly, the most illusive and the most important of fertilizers. It acts as a sort of stimulant, especially such forms as nitrate of soda or sulphate of ammonia, and enables plants to draw upon sources of potash, phosphoric acid, etc., not available otherwise.

Phosphoric acid is especially associated with reproduction. Its presence in the soil is denoted by plump grain, and abundant blossoming of fruit trees.

Potash has much to do with the ripening of the wood, seeds, and fruit of plants, and is especially essential to successful fruit growing.

Alfalfa at MacDonald College.



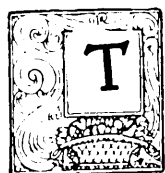
ALFALFA, 2,393 TONS TO THE ACRE.

The above photograph shows the fourth crop of alfalfa produced on this block during the past season. The eighteen inch growth shown was allowed to freeze down and act as a mulch. This plot produced at the rate of 23.93 tons of green alfalfa to the acre which,

when cured, made 8.27 tons of excellent hay. A much larger plot one year older yielded at the rate of 29.53 tons of green feed to the acre. Alfalfa does well in Quebec. It should be more generally grown.

L. S. K.

Short Course T'it Bits.



THE drop in the export trade of Hogs should not lead to the misconception that the trade is on the decline.

On the contrary, market receipts have been constantly increasing during the last five years, home consumption has increased and the packers are using more animals than they ever did before. Farmers in the Province of Quebec have in Montreal the best Hog Market in the Dominion, and yet it is a fact that their produce is in the minority on that market. The hog is a splendid scavenger and is a means of marketing feed that would otherwise be wasted on the farm and for which the farmer would get no returns. The farmer of Quebec can keep no class of live stock which will reap as quick and as economical returns—more especially as he is a dairy farmer and so finds a profitable market for his dairy by-products right on his own farm.—Prof. BARTON.

A three year rotation—hay, hoed crop, grain—is the best for the average farmer of Quebec, for dairying. With this rotation 50–100% more cattle could be profitably kept than is the case at present.

If the farmer is satisfied to manage his farm in the slipshod way quite a number of farms are managed, then rotation of any kind will be useless. To practice a rotation successfully cultural methods of the best must be carried out. A badly managed rotation is worse than none.

Soil management means such treatment of the soil as will ensure it producing good crop results each year and

over a period of years. There must be abundance of plant food in the soil and it must be in an available condition for the plant to take up. Drain to increase the warmth of the soil. Seed will not germinate as well in a cold soil. Cultivate well to conserve moisture, without which warmth and proper tillage is useless.—Prof. GRIDALE.

When the value of root crops is fully appreciated thriftier livestock, larger milk checks, smaller feed bills and cleaner farms will be the result.

Our climatic and soil conditions are suitable and with the observance of proper cultural methods roots of excellent quality, together with large tonnage, can be had.

One pound of dry matter in mangels (about 8 lbs. of roots) is equivalent in feeding value to one pound of dry matter in mill feeds and a little more than one pound of dry matter in corn silage; hence the possibility of mangels profitably replacing a part of the grain ration. In addition, the succulence of the root crops facilitates the digestion of coarser feeds. These facts indicate that where winter dairying is practised, roots become indispensable for best results.

Aside from the value for feeding purposes there are good reasons for growing root crops, especially on small farms in the Province of Quebec. With good care and preparation of the soil a large amount of feeding material can be grown upon an acre. Twenty tons per acre is not an uncommonly large yield under good conditions of soil and weather, yields of over twice that amount have been obtained. Grain crops of all kinds

do well after roots, for the latter not only necessitate clean cultivation, but open up the soil by means of their extensive root systems. Cultivated crops should come regularly in the rotation, and roots should be included in the list of such crops on all Quebec farms—G. H. CUTLER.

Prof. Grisdale in his remarks on Beef Cattle emphasized the importance of quality and type in the feeding steer. In feeding practice rapid gains and cheap gains will be made with good animals, cheap roughage and judicious use of meal. In the early feeding stages there should be a liberal allowance of cheap coarse roughage, the meal should be fed sparingly until the feeding period is well started. The increase should always be made gradually.

In the Province of Quebec the sheep business should receive much more attention. A small flock will produce a revenue impossible through any other class of live stock. The sheep at the same time demand little attention, labor, or care, yet on account of this very fact they are too often sadly neglected.

Breed is a question which each man must decide for himself. Careful selection and complete development of the individual in any breed are what account for creditable representatives. Proper development entails a great deal of detail. The work must begin with the calf and continue often five or six years. Lack of feed in the heifer stage and too early breeding are frequently responsible for the small cow with little strength and less capacity. Correct practice will vary in individual cases, but very often the young heifer is called

upon to do much work while she herself is poorly developed and not too well nourished. The result is a check in growth, a small cow at maturity, often injured in vitality, therefore a poor proposition for either milk or stock.—Prof. H. BARTON.

Soiling crops go hand in hand with the root crops. Where roots are needed during the winter months to supplement the dry feeds, soiling crops are needed during the summer months to supplement the dry pastures. Crops imitative of the root crops will meet this end most adequately. Those which combine bulk, nutrition, succulence, palatability and ease of digestion will render most efficient service. Among others most suitable for our conditions may be mentioned—winter rye, oats, peas, millets, corn and vetches. Plow up a part of those barren pastures. You cannot depend wholly upon pasture for the summer's feed.—G. H. CUTLER.

In 1909 the total value of the Canadian Export trade in beef showed an increase of \$36,218 compared with the output of 1905. Since 1908 this export trade has declined slightly. Increased home consumption partly accounts for the decrease in exports, but even this is not sufficient explanation. With the steadily growing demand for Canadian beef in foreign markets together with the Montreal home market which we hold second to none in Canada the farmers of the Province of Quebec would do well in regarding beef-raising more favourably. Steer feeding is one of the best methods of disposing of hay, silage and roots. The right type of steer is well adapted to making economical use of rough feed, and here lies a secret of cheap beef production.

particularly in the early stages of feeding. Farmers of this Province having plenty of pasture land for summer feeding and who raise large quantities of rough feed for winter, will do well to realize what such an industry, when properly conducted, would offer them. — MR. COOLEY.

That the sheep industry in Canada has been on the wane during the last three years cannot be disputed. It is true that the export mutton trade in 1905 was less than one-fourth of what it was in 1908, but for the last three years there has been a steady decrease in output.

Home consumption of mutton has not increased in proportion to the decrease in exports. Then the total value of mutton marketed has, for some time, been decreasing.

One of the chief reasons for this is that one farmer's saleable lambs are ready for market at exactly the same time that his neighbour's lambs are finished. The drover calls and claims that markets are dull. Perhaps feed is scarce. As a result the farmer is compelled to sell at a time when the supply exceeds the demand, with prices relatively low.

Farmers may avoid being at the mercy of the drover by having their lambs finished at a season when fewer lambs are offered for sale and when higher prices are paid for exactly the same quality of mutton.

Dressed lambs of good quality, weighing thirty pounds each, always command fancy prices on the Xmas and Easter markets. Aim at supplying these markets, thereby realizing the actual value of your lambs.—MR. COOLEY.



La Fameuse.

By R. W. SHEPHERD, Como, Que.



THE name is French, yet the fruit is not known or grown in France. But, without doubt, the apple originated from seeds that were brought from France about two hundred and fifty years ago, probably by the Sulpician Fathers, who were the first missionaries, and who were great lovers of fruit and floriculture, as they always established gardens at their missions, as religiously as they founded churches.

Much has been written about this famous apple, but its origin is obscure. Downing says:—

“A celebrated Canada fruit, probably an old French variety, which has its name (pomme de neiges) from the snow white colour of its flesh, or, as some say, from the village from whence it was taken to England,” all of which is erroneous and misleading.

The missionaries found the Island of Montreal to be very fertile and well adapted for fruit growing. Seeds from France were sown and re-sown, and after many years, probably fifty or more, the famous or “La Fameuse” was evolved. With what delight these early missionaries would view the

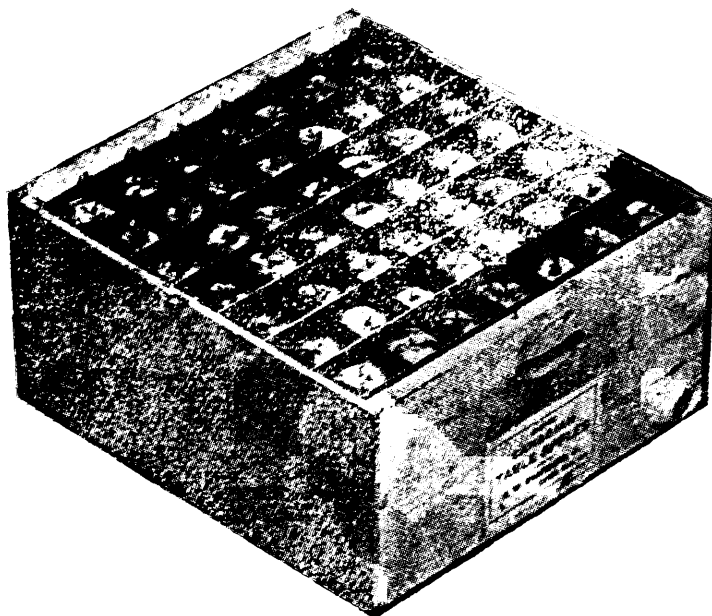
wonderful change wrought by our Canadian climate when the beautifully coloured fruits were borne on the trees. These French missionaries had been accustomed to see in France, pale, yellow, whitish skinned or russety apples; for red apples are not as plentiful in Europe as on this Continent; I mean such deep red apples as are grown in our Northern country. They have not the sunshine and cool nights in September that we have to produce the exquisite colourings of skin. To-day, in Paris you rarely see red apples exposed for sale in the shops, the favourite apples are yellowish or russety, and apples of Fameuse colour are not popular with first class fruit dealers in Paris. In 1903 (a year when the apple crop failed in Europe) I was induced by the Canadian Trade Commissioners to ship some cases of fancy Fameuse to a leading fruiterer in Paris. The next Spring I visited Europe and called on this firm; they told me: “Your apples were very nice, but red apples are not popular here, we prefer them uncoloured.” It is quite the reverse in London. The Englishman cannot get enough red apples of good quality.

La Fameuse is known to have been cultivated on the Island of Montreal

over two hundred years. About 1818 the variety was exhibited in London. This was vouched for by the late Charles Gibb, that great pomologist, in a paper read before the Montreal Horticultural Society about thirty-five years ago; and until the advent of the McIntosh Red (which is said to be a Fameuse seedling) never had a rival for first place in this Province, for profit. There are in many orchards about Montreal, trees that produce apples very near akin to La Fameuse—apples that may pass for it and meet with ready sale. This is evidence of inbreeding, and that

We know of red Fameuse (which is La Fameuse), Fameuse Barré, of which, no doubt, the Snow apple of Ontario is a degenerate offspring, Green Fameuse, Fameuse Sucré, and many seedlings that closely resemble the parent but do not equal it in quality. Then Canada Baldwin, Decarie, La Victoire, Elzear, McIntosh Red, Scarlet Pippin and Shiawassa Beauty are said to be seedlings of it.

La Fameuse is a variety which, in consequence of its great age, is more difficult to maintain in health and vigour than formerly. This apple has proved



FAMEUSE, PACKED FOR EXPORT.

the early missionaries and settlers of the Island of Montreal planted again and again the seeds of their best seedling apple for generation after generation.

I once heard a remark by that veteran pomologist, the late Dr. T. H. Hoskins, of Vermont, which struck me forcibly at the time. He said: "I believe there are about three hundred kinds of Fameuse." This, of course, was said in a joke, but expressed the fact that many apples of Fameuse type were known to exist on the Island of Montreal and vicinity.

to be superior for generations, in quality, to all others of our Quebec apples, and also the most profitable. But are we going to preserve it? It has stood the test of years—almost wiped out of existence in the terrible winter of 1859, but young orchards were started on a large scale the following year, because the variety was superlatively the most popular and the most profitable. But the severe winter of 1903-1904 was a great setback, almost 50% of the bearing trees in some districts was killed or irretrievably injured. And what is

being done to maintain the Fameuse? Very few orchards of that variety are being set out on the same scale as thirty or forty years ago. For example, the large orchard set out by the late Mr. Madore near St. Anne de Bellevue, containing seven thousand trees, contains only five hundred Fameuse, and this on the Island of Montreal, the home of La Fameuse.

It is not an ironclad variety, but requires careful attention and protection. Nurserymen have been too careless in cutting scions from diseased trees that have become black-hearted by the attacks of severe winters, hence, in my opinion, the variety is to-day much weaker in constitution and less able to withstand the shock of the extreme winters that this Province is periodically subject to. La Fameuse does not live as long as it did half a century ago. When I was a boy, I remember seeing orchards of Fameuse on the Island of Montreal in flourishing condition that had been planted sixty or more years. To-day there are few flourishing Fameuse trees over thirty years of age; in fact we expect the trees to decline after being twenty or twenty-five years set out in orchards.

To compare Fameuse and McIntosh Red trees, as to vigour, is like comparing an old man and a young man. But on the other hand La Fameuse has survived many other varieties of dessert apples for which the Island of Montreal has been famous. Pomme Grise and Bourassa, once rivals for first place for dessert with Fameuse, have passed away. Scarcely any of these apples are to be had now. Forty years ago Pomme Grise was a favourite with Montrealers who shipped them in half barrels to friends in England, and they were considered one of the best of dessert apples for mid-winter. Bourassa was also a

favourite and a russety apple of high quality. Both these varieties, however, were shy bearers, whereas La Fameuse has always been, and is to-day, a heavy bearer. Therefore, being so profitable and possibly more hardy than the two others above named, it has been retained.

But greater efforts must be made to start well when planting out an orchard of Fameuse. We must see that the tree is not blackhearted and that the branches have started from sound, well ripened wood. La Fameuse, being only half hardy, is inclined to extend its growth late into the season in the nursery; and unless the second year's growth is well cut back, in the Spring of the third year the branches will likely start from unripened wood. This is a great mistake, can never be rectified afterwards, and must result in short lived trees. It is better to cut back the growth of the second year down to the sound wood, and allow the young tree to grow up the third year in a single stick. The fourth Spring, in nursery there will be no trouble, when cutting back the preceding year's growth, to reach sound wood high enough for branching. Nurserymen should be careful to avoid allowing the Fameuse to branch out from buds close together, and thus form a cup or basin, which is a bad form of tree, as it retains the snow and ice in winter, killing the bark on the upper side. It is better to retard the branching until the fourth year, so as to branch high enough from the ground, rubbing off intermediate buds along the stem in order to have sufficient space between the lateral branches. It is, in my experience, more difficult to grow good, sound, nursery trees of the Fameuse variety than any other, but I also believe that it is well worth the trouble.

Spraying Notes.

By Mr. NORMAN E. JACK.

NOTE.—Mr. Jack was one of the pioneers in the work of spraying and is therefore well qualified to deal with the subject.



As the spring days approach the thrifty farmer who possesses a spray pump should see that it is in good order so as to be ready to fight the orchard enemies—insects and fungi. If his apples have been spotted and he intends to purchase a pump, it is as well to do so before the work begins, and when buying he should see that the article he purchases “fills the bill.” It must be durable, easy to work and efficient; all the working parts should be brass or brass lined, for copper sulphate will corrode iron, but brass will withstand it. It must have a good sized air chamber, as the compressed air keeps an even pressure, and it does not take much pumping to keep a steady spray; while without the air chamber the liquid comes in squirts and makes very poor work. Of nozzles there are many varieties; but one that will throw a fine spray a long distance answers best; the main fault with too many is that they throw too coarse a spray. A nozzle that will throw a fine spray quickly and will not clog with dirt is necessary, for there is nothing more trying in the midst of spraying than when the nozzle clogs and has to be taken apart to remove the obstruction.

Most people know that Bordeaux Mixture is made by putting 4 lbs. of sulphate of copper into a coarse piece of bagging and allowing it to dissolve in a two gallon tub of warm water;

while in another tub is measured 4 lbs. of unslaked lime, which is slaked and added to the sulphate solution, which has previously been diluted with 40 gallons of water. It is necessary to keep this stirred while spraying, as by neglecting this the foliage is likely to be scorched. For this reason it is easier for a novice to get a pump with a mechanical agitator. When Paris green is added it should be just before the liquid is applied, and at the rate of 4 oz. to the above quantity of Bordeaux Mixture. The pump when not needed for the orchard is useful for spraying potatoes, for washing vehicles, watering transplanted plants, and I know of its being used for applying whitewash and kerosene emulsion in the hen-house and stables.

In the orchard there is no doubt that faithful spraying saves 80% of the fruit. In spraying apple trees care should be taken not to let the trees drip, but to cover the leaves thoroughly. This can only be done by patient application, and even in this work the difference of method is surprising. One man rushes his horse and cart through his orchard, scattering the spray everywhere, and paying no attention to the fact that every branch must be wet with the solution to obtain good results; and then gives his verdict that “spraying is no good.” Another will spray when the trees are in full bloom, and so destroy the pollen and the trees at the same time; while yet another thinks to put in the work when a gentle rain is falling, so that his spray runs off with the water and is wasted.

Three applications are generally considered sufficient, and most economical.

The first one should be before blossom-time and the other two afterwards. If, however, a damp season comes when the apples are just set, four sprayings may be needed. The Bordeaux Mixture kills many insects and keeps the trees free from fungi; and anyone who has learnt the usefulness of the spray pump when caterpillars abound on the gooseberry and currant bushes, will never return to the primitive method of hellebore with a watering can. Fruit growers have already had a lesson that inferior fruit will not sell, and that spraying is necessary to keep up the standard.

It is noteworthy that since the above article was written for the Weekly Star in 1897, very few changes have been made in the system of spraying; but the advent of the power sprayer has made the work easier and more thorough;

also the value of lime sulphur as a wash has been demonstrated.

If there is an orchard which requires two days spraying, the power sprayer will pay, both in saving time and evenly distributing the material. The lime sulphur, of which there are several brands which can be bought as cheaply as it can be made at home, should be put on early, before the buds open and it will then destroy fungus, aphids and other enemies of the apple tree.

A home-made lime sulphur mixture is prepared by boiling one pound of good lime and two pounds of sulphur in one gallon of water until there is a thorough solution. This is diluted by adding water at the rate of one to eight, for winter spraying; but a proportion of one to twenty-five is safer for the summer. This mixture will take the place of the Bordeaux if the second spraying has added to it two pounds of arsenate of lead.



A LECTURE IN FORESTRY.

HORTICULTURE NOTES.

On the evening of October 28th, 1910, those students of Macdonald College who were interested in Horticulture met for the purpose of organizing a Horticultural Club. On the advice of Professor Blair, the Executive Committee was elected mainly from the students, and now consists of the following officers:—

Hon. President, Professor Blair. Hon. Vice-President, Mr. J. F. Monroe. President, F. E. Buck. Vice-President, C. M. Spencer. Secretary-Treasurer, F. H. Grindley. Committeemen, R. Innes, '11; D. B. Flewelling, '12; W. J. Bookey, '13; G. R. Young, '14; Archie Walker.

The objects of the Club are to promote Horticulture in general and to increase the knowledge of the members in all subjects relating to it.

The Club meets on the second and fourth Monday of each month and the programme generally consists of an address by a member, or prominent horticulturist; general discussion; paper on current horticultural topics, to be read by each member in turn; discussion and social ten minutes.

The addresses already delivered have been extremely practical and interest-

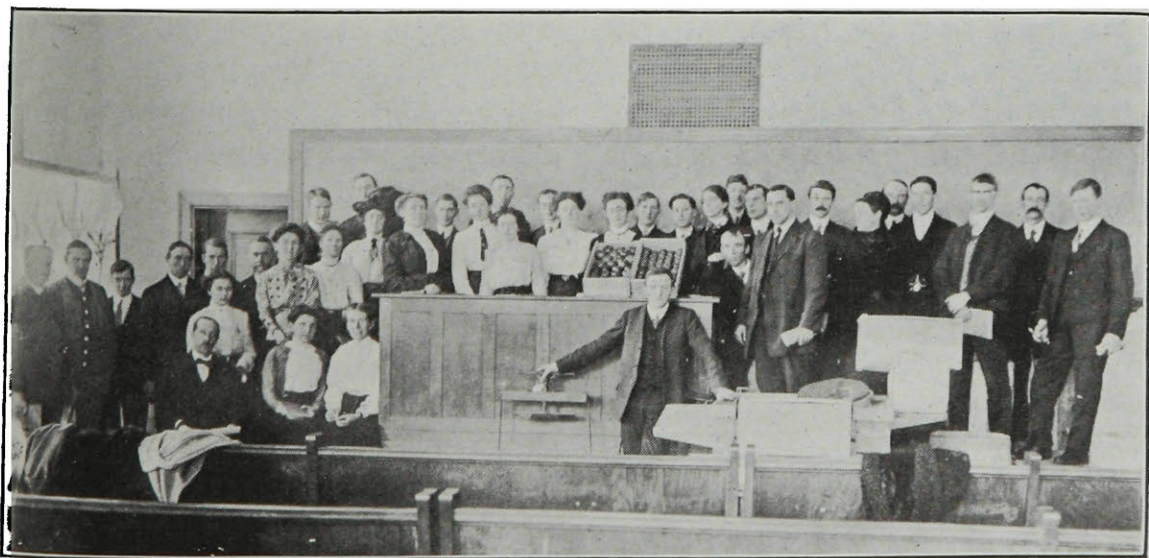
ing, and we feel certain that all those attending the meetings of this Club will not fail to receive considerable benefit.

The annual Winter meeting of The Pomological and Fruit Growers Association of the Province of Quebec was held at St. Hyacinthe, Que., on Dec. 6th and 7th, 1910.

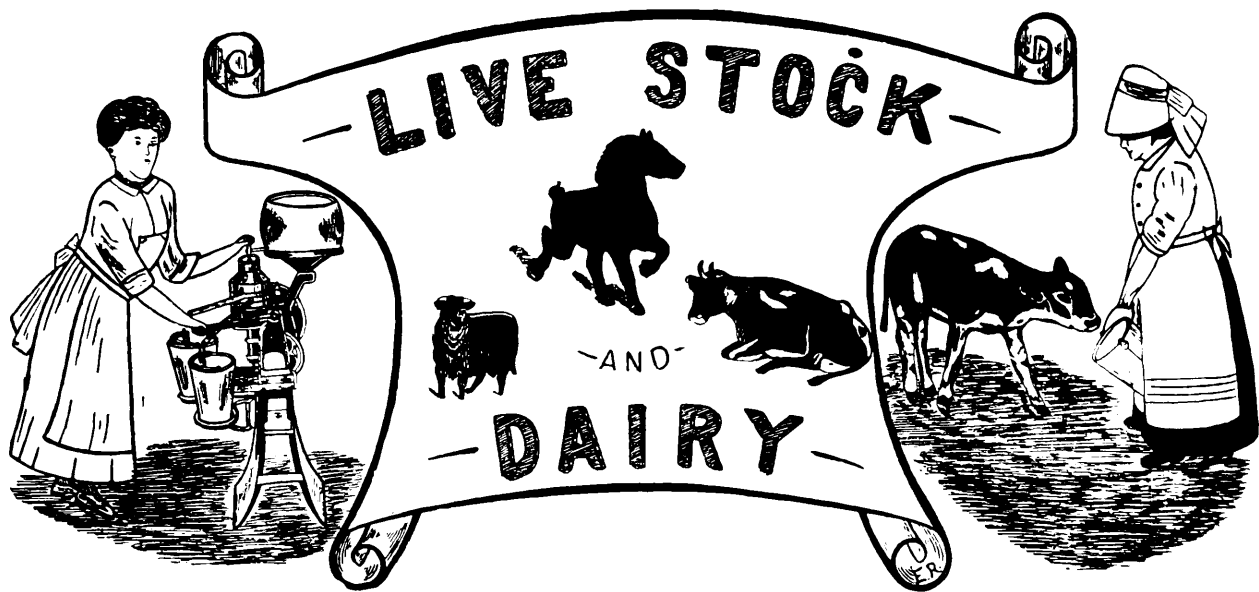
A number of very interesting and instructive addresses were given during the sessions. These included a paper on Orchard Cultivation by William Dreher, and one on the Spraying of Orchards by L. V. Parent. Both these men are third year students of Macdonald College.

The second annual meeting of The Quebec Vegetable Growers Association was held at St. Laurent on Dec. 14th, 1910.

Among various interesting features of the meeting was an address on Onion Culture by Mr. Dreher, and a paper on Tomato Culture by Mr. Parent. These two men are deserving of all praise for beginning so soon the good work of dissemination of knowledge, for which they are being educated at Macdonald College.



THE HORTICULTURE SHORT COURSE STUDENTS, 1911—AT AN APPLE PACKING DEMONSTRATION.



Live Stock Judging Competitions in the Province of Quebec.



BROME COUNTY, Que., has the honour of introducing the first Boys' Live Stock judging competition into the Province.

In 1903, the Hon. Sydney A. Fisher gave to the Agricultural Society of Brome County a certain sum of money to be used for the encouragement of stock judging for boys under 21 years of age. Owing to the keenness shown by the contestants and the comparatively large number who go in for the work, the Minister of Agriculture has since made this an annual feature of the County fair.

In order to give all a fairly equal chance in the competition, the boys were divided into two classes; one for those under seventeen and one for those over seventeen and under twenty-one. Each section was to judge two classes of dairy cattle—cows and heifers—with four in each class. The cattle were given numbers by the judge according to their position in the ring. Thirty minutes were allowed for judging and

placing each class, and for the reasons to be written by the contestants. At the completion of the judging, the papers were handed in to the expert judge in attendance, who then placed the cows, giving at the same time full reasons for his decisions.

The advantages of such competitions are perfectly obvious. The boy is at first tempted to try his luck by the inducement of the prize money. Any body acquainted with the average country boy in the Province of Quebec will know that spending money is none too plentiful. After considerable coaxing by parents and friends, intermingled with jeers and scorn from elder brothers, the boy would, no doubt, give up his ambitions of coming before the public, were it not for the inducement which first caught his eye, and for the thought of the great possibilities that success would bring him.

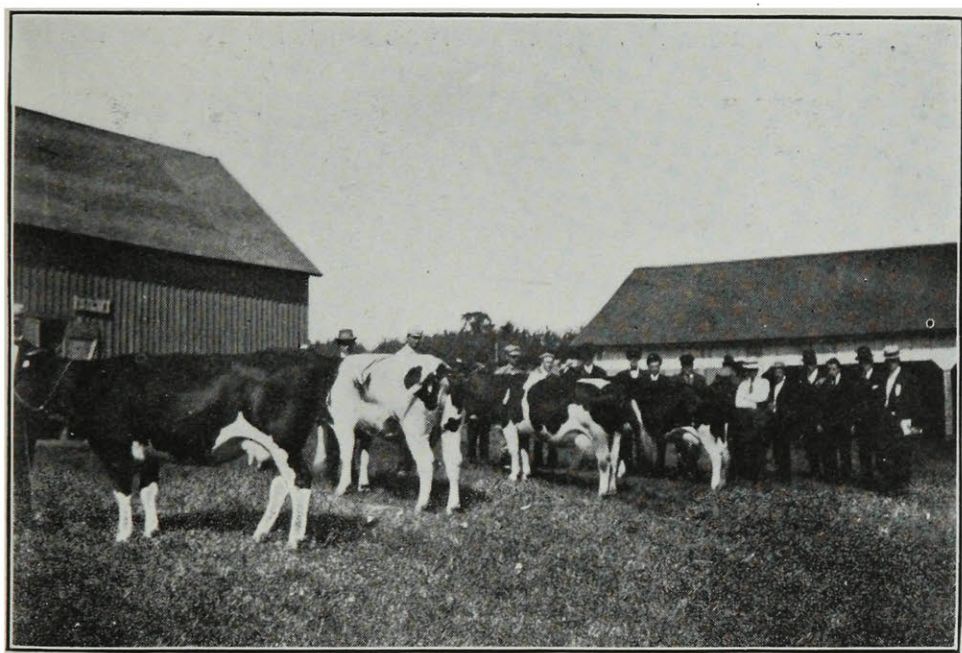
Once persuaded to try his hand, it at once dawns upon the boy that if he fails and some other fellow succeeds, the taunts of the elder brothers will

have become quite applicable. This at once arouses the pride of the would-be contestant to a spirit of competition, and he immediately sets out to find all that his neighbours know about dairy cattle, to gather odds and ends of literature from the agricultural papers and to try and apply his newly gained knowledge in a practical way at home.

It may be asked: "Is it necessary to have judging competitions to induce boys to study live stock?" Perhaps not. But the writer has endeavoured

sons. Concentration is the remedy. Herein lies the value of judging competitions, for they train the powers of observation, educate the young men to a better appreciation of live stock, and in some cases induce the boys to seek a wider agricultural education, where without that first stimulus the desire would never have been created.

It is a matter of considerable surprise to the writer that this matter is not being taken up with greater interest among the public men of to-day; for to



A COMPETITION AT SHERBROOKE FAIR.

to show that they furnish a purpose for the young stockman to work for; and while he may always have had the privilege of being with, and handling live stock on the farm, it does not take him long to find out how little he really knows of what constitutes the utility and the breed type; and also how difficult it is to explain, orally or otherwise, his own views to some other person.

Seeing and not observing is too often the common fault of farmers and their

his certain knowledge only the Brome, Sherbrooke, Argenteuil and Huntingdon fairs are now making this a feature of their programme. Having personal experience of the advantage of this education, the writer would urge on the Provincial or Federal Representatives—or, better still, both, to follow the example set by the Minister of Agriculture, and to make it possible to have a Live Stock judging competition in every county in the Province.

C. SWEET.

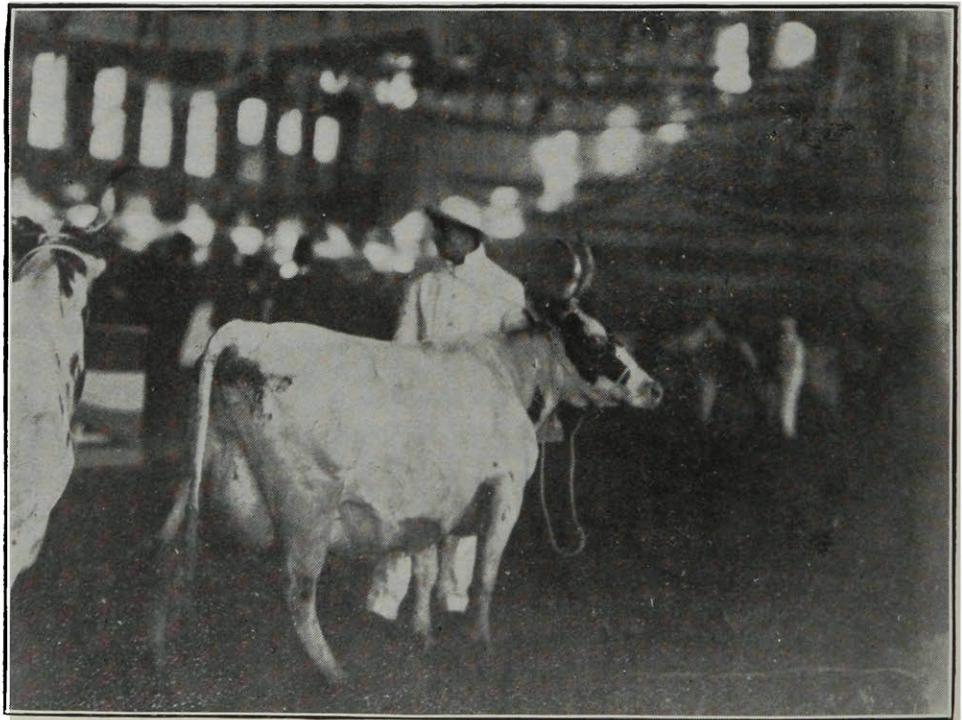
The Ottawa Fat Stock Show.



ARE we really agricultural? Perhaps we are, but it is surprising at times to leave our honoured walls and get into an atmosphere infinitely more so than our own. This was the experience of those students particularly interested in Animal Husbandry who were allowed to attend the Live Stock and Poultry Show held at Ottawa last month. College can teach us much, yet there is a great

for the excellence of the displays, and Macdonald students knew how to get the most benefit from the proceedings.

The classes themselves were educational and often surprising. Ayrshire men rejoiced over the sweeping victory of Mr. Ness's "Lucky Girl" in the dairy test, a cow that is a credit to her breed and one that will be heard of again in the future. Holstein supporters were correspondingly disappointed. Clyde horses were very much in evidence



LUCKY GIRL.

deal to be learned from such an excursion, by coming in contact with the finest horses and cattle to be found in this section of the Dominion, not to mention the breeders themselves.

During the fair week the capital was literally invaded by coon-coated farmers; the hotels were full of them, so was every thing else. One heard of, talked and eat all kinds of stock. The very air was laden with it. The enthusiasm on the part of all, however, speaks well

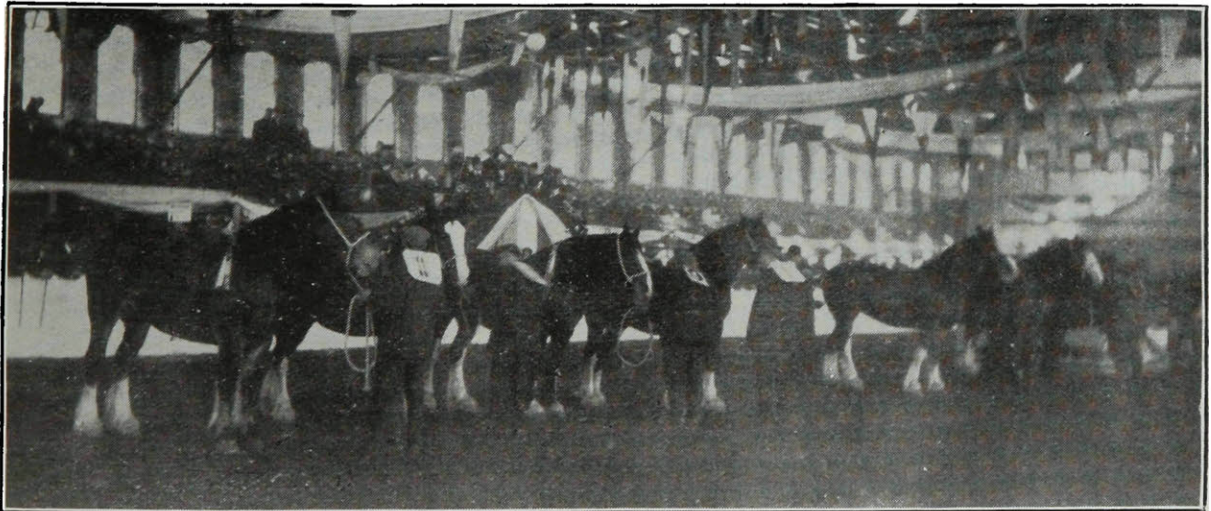
and drew a great deal of attention. Both in the aged stallion and mare classes, Quebec breeders had nothing to be ashamed of, as animals from this province took high place. While the lectures of intensely practical men were well attended, there was not any too great number of questions asked at the close of them. Nevertheless, we believe that this phase of exhibitions is one that accomplishes much good. If more popular addresses, and better

ones were made a more prominent feature of our county fairs, the benefit derived from a day's sojourn at many of them would be doubled. The light horses were not prime favorites, this being too specialized a form of stock for the majority present. What is the place of the saddle horse on the farm?

Besides the show itself the Experimental Farm was visited. The Biological Laboratory, too, was an interesting feature for the Seniors. As a matter

of fact, the points of interest in Ottawa generally that escaped some attention were few, much being seen in the short time.

Our only regret in this connection is that there are not more exhibitions in this vicinity that we can visit, for we consider that they form an integral part of the training of a college agriculturist. We hope to get to Ottawa again next year and trust the new hotel will be finished by then. It will be appreciated.



JUDGING THREE-YEAR-OLD CLYDESDALE MARES AT OTTAWA.

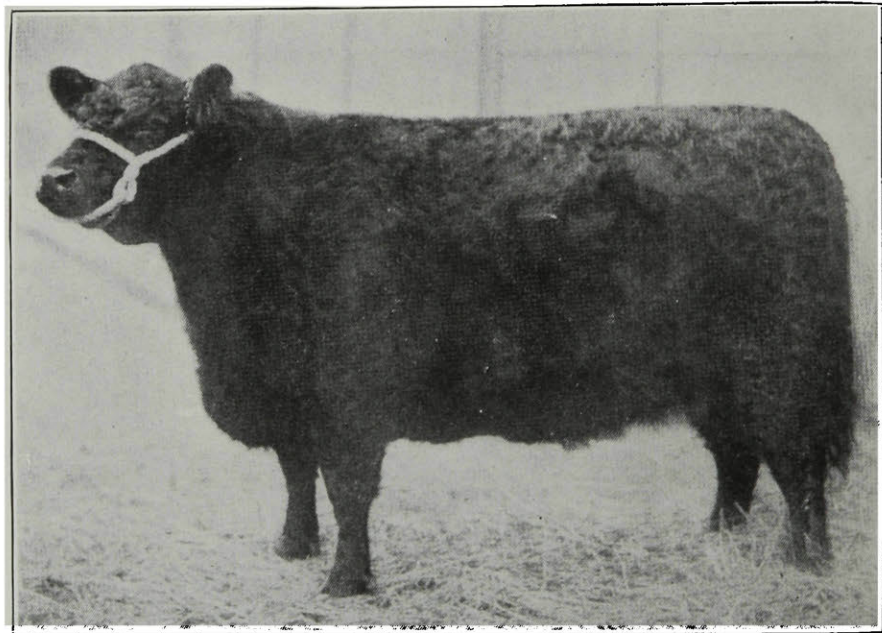
Feeding the Beef-Bullock.



KNOWLEDGE of the science of feeding is a most important factor in rearing and finishing the bullock. Without a complete understanding of these principles, it may be possible for the farmer to make a fair margin of profit, but to attain the highest degree of success, we must allow scientific principles to influence not only the composition of the rations, but the manner in which these rations

of scientific feeding, or how successful a feeder he has been, he will turn to his friend and remark: "Those long-legged, shallow-bodied brutes are hard feeders, give me the short-legged, thick, smooth, well-fleshed bullock for economical returns." It is well worth noting then, that there really exists a relation between the type of bullock and his capacity for beef-making.

At the Nebraska Experimental Station, Prof. H. R. Smith has conducted



are given. Important as a complete knowledge of scientific principles in feeding may be, yet the greatest success cannot be accomplished by knowing only the composition of foods and their proper place in the ration.

The type of bullock to be fed is a strong factor in determining whether or not the gains made are the most economical. It is in a large measure true that the profits are made at the time of buying the bullock. It matters not how much a man may understand

a number of interesting experiments along this line, with the aim of determining the relation that exists, so far as experimental work will show, between animal conformation and quality, as affecting gains. Different types were used, some of the low-set, smooth type, possessing quality, others of the rangy and rougher type. The differences in daily gains of the two types were not so marked, but the low-set, smooth and compact types took on flesh much more rapidly and sold for a higher

price per pound than did the rangy and rougher types.

The age at which a bullock will make most economical use of his feed is also worthy of note. The young animal of twenty-four months will make more economical gains than one thirty-six months old. The reason is that more bone and muscle building takes place in the younger animal than in the case of the older, and here is the secret of cheaper gains. With the older animal the formation of new tissue is chiefly fat, and this gain is more expensive than in the case of bone and muscle formation. It has been demonstrated that the two-year-old made over one-half pound more gain per day during the experiment and at a cost of 53c. per cwt. less than the three-year-old.

Aside from understanding the profitable type of bullock to feed and the age at which this animal will make cheapest gains, it is well that we have an intelligent idea of the function of the various food constituents. Protein is a food constituent which may be found in relatively large quantities in clover-hay, alfalfa, wheat-bran, oats, peas and gluten-meal. The function of protein is for the building of bone, muscle and lean meat. The fats of the animal body are, to a great extent, produced from vegetable fats, which we find in many of our concentrates, such as oats, peas and flaxseed. The vegetable fats also aid in supplying the animal body with heat and energy required for ordinary activity. The chief source of heat and energy, however, is a class of food constituents called carbohydrates. These are to be found in the coarser foods, as corn-silage, hay and roots. It must be remembered that the body of the feeding steer is composed of from 50% to 55% water,

and as the period of feeding advances, the proportion of water gradually reduces. For this reason roots should hold a prominent position in the ration, particularly during the early stages of feeding. Then, as the feeding period advances, with a decrease in proportion of water and an increase in proportion of fat, the root ration may be lessened, but with a gradual increase in concentrates. This gradual increase in concentrates is made that the demands for fat production may be met.

While the practice of lessening the roughage ration and increasing concentrates, during the latter stage of finishing, is recommended, yet the successful feeder is very careful that no radical change of ration is made. He will also keep just within the appetite of his animal and so balance the foods that any addition to the ration will not result in disordered digestion. At no stage in the feeding should concentrates be so increased and roughage reduced as to cause constitutional disturbance. A fair amount of roughage in the ration to mix with highly concentrated foods, such as pea-meal or corn, has a very beneficial effect in that the digestive juices of the stomach act more readily and much more effectively on such a combination of foods than where the ration is composed almost wholly of concentrates. The attendant must be observing and arrange rations in a way to meet the requirements of individual animals. "The eye of the master fattens his cattle."

There is a close relationship existing between palatability and digestibility of foods. The digestibility of foods depends so much upon the manner in which they are prepared and placed before the feeding bullock, that emphasis cannot be placed on one as being

more important than the other. The chemical composition of a food is not necessarily a sure guide that the ingredients present are palatable and easily digested. Nor does it follow that because these ingredients may be easily digested, that the food is palatable. We must have these two influencing factors combined to get best results. Foods with an agreeable flavour and which are eaten with a relish, even though the coefficient of digestibility

may be comparatively low, yet the gains made are very often more satisfactory than in a case where a food lacks palatability, but shows a somewhat higher coefficient of digestibility.

In conclusion, it might be said that the successful feeding of the bullock depends largely on getting the right type of feeder and then arranging the ration to meet the requirements of the various stages of growth and finish.

The Short Course.

By J. M. CHILDERHOUSE, Editor, Agricultural Dept., "Central Canada Citizen."



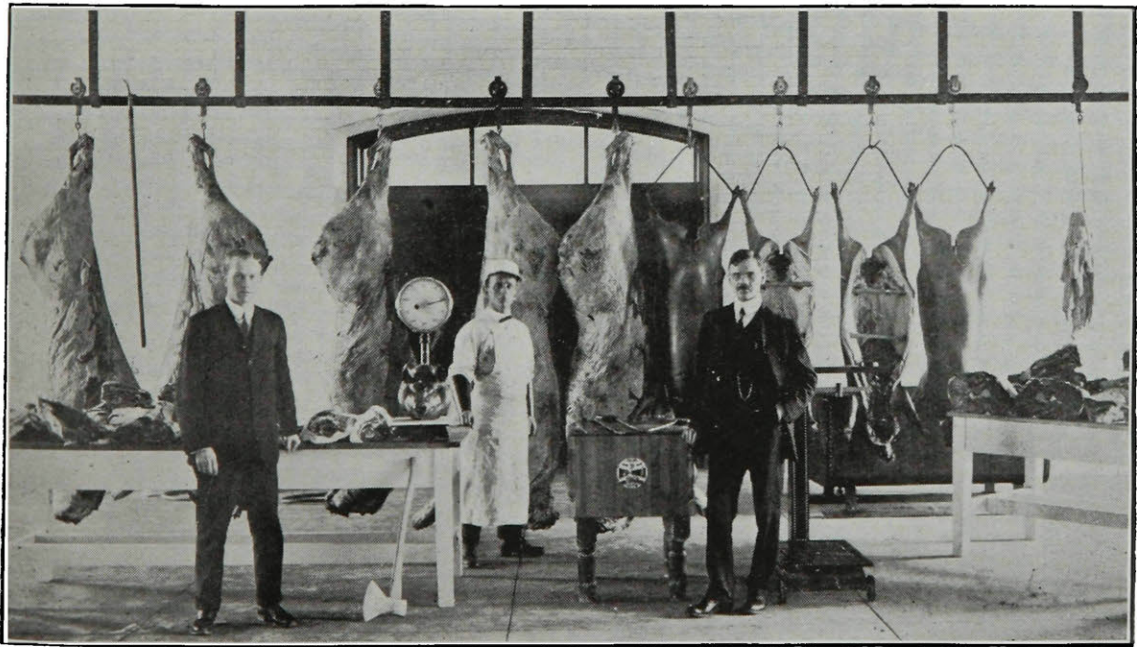
ONE of the first things that came to my mind upon the conclusion of the Macdonald College Short Courses in Live Stock and Cereal Husbandry was how little we farmers really know of our business and how really worthy farming is of close study and careful thought. The wonder came to my mind also of what would be the result if every farmer in Canada knew and carried out in his daily labours the things that were so well taught us by our instructors. I think that by doing so we could easily double our yields in every line without adding as much as a square foot to our cultivated acreage. And, further, I think that by doing so we would still be a long way from taxing the capacity of the soil. Nor is that all to be considered. There would be almost an equal gain in quality, and the foundations would be laid for more peace and contentment than any person can conceive of.

One thing was dispelled from my mind and that was the impression, which I am sure some others have had, that a short course at an agricultural college is a kind of a jovial holiday. Pleasant and cheerful it certainly was, but easy—not at all. It was a case of work from start to finish. We were continually on the go, and a fellow had to be very alert to get the full benefit of the instruction that was given. There was not much skimming over a subject either. The professors went thoroughly into the practical points of whatever they took up, whether it were the horse, the cow, the sheep, methods of cultivation, feeding, plant diseases or any of the other subjects touched upon. To know fully all that the lectures contained would constitute a very broad knowledge of agricultural subjects. To put it all into practice on one's own farm would build the sure road to prosperity.

One great value of the short courses, I think, is to stimulate thought. Those

attending the courses were mostly practical farmers, and I think we all realized, while at the college, how apt we are when alone on the farm to become satisfied with ourselves and to nurse our pet theories without endeavoring to test their value and their foundation in truth. But one feels his view broadening out and sees his work taking on a better look, and feels himself a little humbler perhaps, when thrown suddenly up against the systematized knowledge gained in wide experience and careful investigation. I tell you I felt that farming, though it does perhaps provide only for the body, was a noble calling, and if honestly followed would bring a man nearer to nature and the Creator as well as put contentment in his heart and dollars in his bank account.

This short note, I feel, should not conclude without using the opportunity of saying how much we admired the wonderful plan and structure of Macdonald College. My travel does not permit me to compare it with many others, but if there is a better in the world I should like to see it. Then, too, there is a happy, homelike air about it that many other colleges have not. Whence it springs I cannot tell, but it is there. And I want to say also how much we appreciated the courteous and obliging attitude of our professors. Their advice and instruction were practical—such as we could carry back to our farms and put into use—and they never seemed to tire of helping. Truly I shall never forget my happy experiences and associates at Macdonald College Short Courses in the year 1911.



A MEAT DEMONSTRATION.

Macdonald Animal Husbandry Society.

Hon.-President, H. Barton, B.S.A.;
Hon. Vice President, R. B. Cooley, B.S.A.;
President, G. Wood, '11; Vice-President,
W. Gibson, '13; Sec.-Treas., A. R. Ness,
'12; Committee, A. A. Campbell, '12,
W. J. Reid, '11.

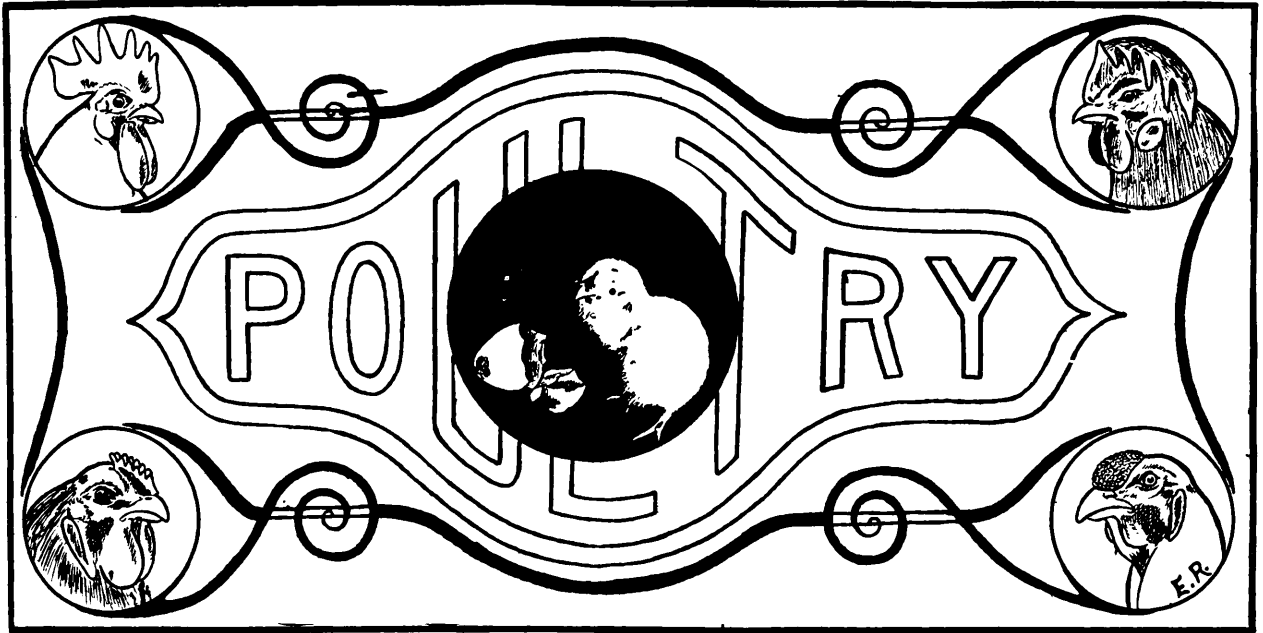
At the beginning of the College year the students interested in the live stock industry thought it desirable to form an Annual Husbandry Society, the purpose being to stimulate an interest in this industry, and so provide a means whereby all interested might meet and discuss practical stock topics not met with in the regular college curriculum, and to meet and

associate with prominent live stock men.

Several meetings have been held, all of which have been well attended. The programmes have consisted of papers prepared by the members with discussions thereon. Mr. W. F. Stephen, Huntingdon, Quebec, President of the Quebec Dairymen's Association, gave an address on "Dairying" on Feb. 1st.

The outlook for this Society is bright, and the hearty co-operation of the members added to the energy of the committee should make for good work in knowledge and progress in this line of industry.

W. GIBSON.



How the Dominion Government Might Help the Poultry Industry.

By E. RHOADES.



THE Dominion Government has not done all it might do to help and encourage the Poultry Industry.

In 1898 two Poultry Stations were established by Prof. Robertson, one in Ontario and one in Quebec. These were afterwards increased to over thirty stations at various points throughout the Eastern Provinces. The object of these stations was to assist the poultrymen of the provinces in which they were situated to introduce the English method of feeding and killing their cockerels. On some of these plants the most useful of our general purpose breeds were kept. In addition to these stations there was and is still a Poultry Department in connection with the Central Experimental Farm at Ottawa.

The Government Poultry Stations are now done away with and the work has in part been taken up by the Provincial Governments in some provinces and by the Macdonald College in Quebec.

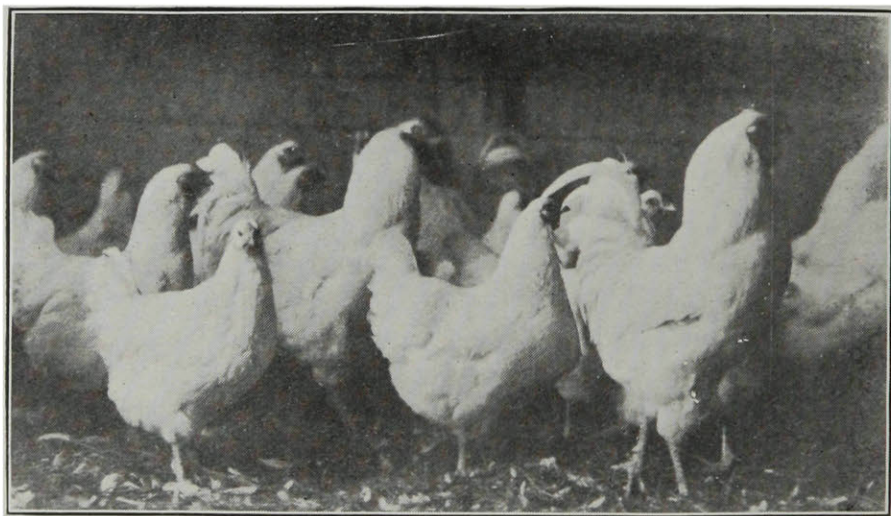
The work done on the Government Poultry Plant at Ottawa is far from satisfactory to those seeking information on any of the many different branches of the poultry industry. A short time ago I visited the plant and to my astonishment found an antiquated poultry plant totally inadequate to meet the needs of the important work which should be carried on there. The condition of the birds was just as one would expect to find under the housing conditions to which they were subjected. Some of the birds were in colony houses, the majority, however, I found in a continuous house which appears to have been built rather from an artistic standpoint than one of usefulness. There is a total disregard for the necessity for as much sunlight as possible, the parts of the house devoted to the laying stock facing west. The windows are all securely fitted with storm windows, and large heaters are placed at intervals through the house, which, of course,

in such a house may be a necessity. While this continual summer temperature may be conducive to the production of more eggs, which I very much doubt, it is not a good lesson to attempt to teach those visiting the plant. It is not practical for the average poultry-keeper to keep his birds under such conditions and it is hard to erase from his mind what he sees there, even though you do show him that a few birds are kept in the cold colony houses.

It is not my desire to cast any reflection upon those in charge of this plant, but rather to point out the utter use-

has been and is being done by the Dominion Government for the Poultry Industry. There may have been other work which I know not of. I hope there is. I have no desire to criticize but I want to point out how, in my humble opinion, the Poultry Producers of Canada, and through them Canadians, might be assisted.

There are two lines of work upon which practically nothing has been done, which are of national importance and absolutely essential for the future success and prosperity of the industry; viz:—First, Scientific Research work



A POULTRY EXHIBIT AT OTTAWA.

lessness of their efforts—no matter how honest they may be—under existing circumstances. There is no evidence that sufficient money is allowed those in charge of the Department to improve their flock of birds by the introduction of new blood or to allow for a proper selection. Doubtless if a free hand were allowed and a modern plant erected the country would get some benefit from the money spent and the faithful efforts of Prof. Gilbert and his assistants, who are now endeavouring “to make brick without straw.”

In the foregoing paragraphs I have attempted to show how much work

upon Poultry Diseases—more especially those affecting the Chick and the Turkey; and second, Co-operation in marketing. This work can only be managed, as it ought to be managed, by the Dominion Government.

The greatest hindrance to poultry development is the inability to renew the flock successfully, due to diseases of which poultrymen know very little, and which are for the most part troubling chickens. The question may be asked: What does it matter whether a chick lives or dies? But is it the case of a chick here and there? I wonder how many people have troubled to

estimate the loss to the country through mortality in chicks? Of every hundred chicks hatched not more than 60 are reared. Let us take it that 50,000,000 chickens grow to market age, and it means that had it not been for the mortality of forty per cent, we should have had two-thirds more, or, in all, 83,000,000 chickens growing to market age. Taking the value of the fifty millions as \$20,000,000 this mortality means a loss to the country of \$13,200,000 in a year. This is a tremendous loss and more than any country can afford to have. It cannot all be avoided, but if scientific investigation will save the half of it, \$6,000,000, the expense entailed would be more than justified. Why does it occur? Simply because no organized investigation has been carried on with regard to the early ailments of our friend the hen. We often hear the old saying used: "Live and let live," but the most of us "live" and only "let live" if it costs us neither time nor trouble.

Two bulletins have been published during the last ten years dealing with poultry diseases and remedies, the one practically a rehash of the other and neither based on very thorough investigation. One of the assistants to the Dominion Pathologist told me quite recently that nothing definite was known regarding such diseases as White Diarrhoea in Chicks and Black Head in Turkeys. Different theories as to the origin of these diseases and their cures are propounded almost every day, and in the meantime our birds are dying by hundreds and thousands with the breeder perfectly helpless. We are taught that "prevention is better than cure," but how can prevention be accomplished with the cause unknown.

The establishment of a Bacteriological Laboratory in charge of scientifically trained men would, in the course of two or three years, be publishing valuable results which would be a boon to the poultrymen of the Dominion. In this Laboratory diseases of all kinds affecting poultry could be studied and causes and remedies ascertained. In connection with this department of research it would be necessary to have a poultry plant sufficiently large to encounter all commercial difficulties which arise.

This is a great work and should be taken up by the Government as the results will benefit the whole of the poultry producers in the Dominion, and the work is too extensive to be undertaken and duplicated provincially or by private individuals.

Let us consider the second point, viz:—Co-operation.

Canada has ceased to be an exporter of poultry products. Surely this is a deplorable statement to have to make. The reason for this is invariably given as "Supply has not kept pace with the demand," but is this true in its entirety? What has been the result of the increased demand on the producer and the buyer? The producer has sold to the buyer all and everything which had the slightest resemblance to either an egg or a hen, irrespective of age or any other consideration. The estimated loss from marketing bad eggs alone in Canada, last year, has been placed by a prominent Canadian produce merchant at \$1,850,000.00. If eggs had been marketed in the proper manner during the past few years, these losses from bad eggs would never have occurred and Canada might still have been exporting eggs.

Is there any reason why this loss should occur from year to year? There

certainly is under the present system of marketing, but it can be remedied easily if gone at in the right way.

Lack of system in marketing is the centre of all the trouble, which is very much aggravated by too much competition. For this there is but one remedy — Co-operation. Co-operation among producers in marketing and between buyer and seller.

It is the custom for a producer to market his produce independent of his neighbour. He imagines his neighbour

flat price, which covers good and bad, and helping the dishonest to the detriment of the honest.

The bad egg question must be considered. Under the present system of marketing, both producer and buyer use no discrimination, and the doubtful quality of the eggs when they leave the producer does not improve by the time the middleman is reached, with whom the consumer deals. Seventeen per cent of the eggs sold by the producer have to be discarded some time during



SHIPPING POULTRY AT MACDONALD COLLEGE.

is his enemy and the consumer is always trying to run down prices. This is not to be wondered at when he receives 15 cents a dozen for eggs for which the consumer is paying 25 cents. Between the producer and consumer, however, we find the eggs have probably changed hands from 3 to 5 times. Each time the handler or middleman has taken his profit for handling, and so the dissatisfaction of both producer and consumer is directly due to the method of marketing—the dealers paying a

their wanderings. The producer should always bear in mind that the consumer never objects to the price he has to pay provided he is getting good quality.

Let me give the reports of two Quebec and Ontario produce merchants to prove that the loss estimated from bad eggs is not exaggerated. The Quebec merchant states that during the period from May 15th to October 1st, he handles from 35,000 to 40,000 cases of eggs (30 doz. per case) and that two-thirds of these cases contain no new laid eggs.

The Ontario merchant handles about 20,000 cases of eggs in the same period and says that with strict candling there would be none classed as new laid, forty per cent of the whole would be stale or shrunken and ten per cent bad. These merchants further state that if the bad eggs were eliminated they could pay from two to eight cents a dozen more for eggs.

How will co-operation help to remedy these evils? By the producers in a district marketing through one centre, thereby cutting out the middlemen, and by these centres receiving only that produce which is good and fresh beyond dispute.

Poultry producers are for the most part in the business on a small scale, too small for them to become responsible for the organization work, and dealers object to paying the cost of organization and then having to come in on an even footing with other dealers who have paid nothing.

All these difficulties will be overcome if the Government will undertake the educational work. The producer must be educated—for his own good and for the good of the industry and the country—to see the advantages of co-operative marketing. With this must also follow the standardization of poultry products, which will do away with the many different grades at present recognized. The standardization of poultry products and co-operation in marketing is an absolute necessity, and is a work of such national importance and character that there should be no question as to where the help is to come from to carry out the work.

The Fruit and Dairy industries have both been assisted by the Government. The result of this assistance is apparent. Both of these industries have been raised

to a higher plane and mean much to the national assets.

When the Fruit Marks Act was passed, considerable opposition was experienced from buyers. A similar Act with regard to poultry might well be passed, and as such an Act is being advocated by both producer and buyer, its better enforcement is practically assured.

Everybody is ready to admit the Government has done a great deal for different branches of Agriculture, the Dairy Branch in particular, and all are proud of the standing Canada has, especially in the Cheese Markets of the world. The Dairy industry is looked upon as one of Canada's greatest industries. We are told that in 1909 the value of the dairy produce amounted to \$100,000,000, but during the same period, under the conditions before mentioned and with practically no help from the Government, the poultry produce of Canadian farms amounted to nearly one-half that amount or at least \$40,000,000.

Very few industries respond to good treatment as readily as does the poultry industry, and there never was a time so opportune for that good treatment to be applied as at present, and more particularly as both consumer and producer are demanding attention and consideration.

The poultry industry is of such importance that it must be looked after, and no Government can afford to ignore it.

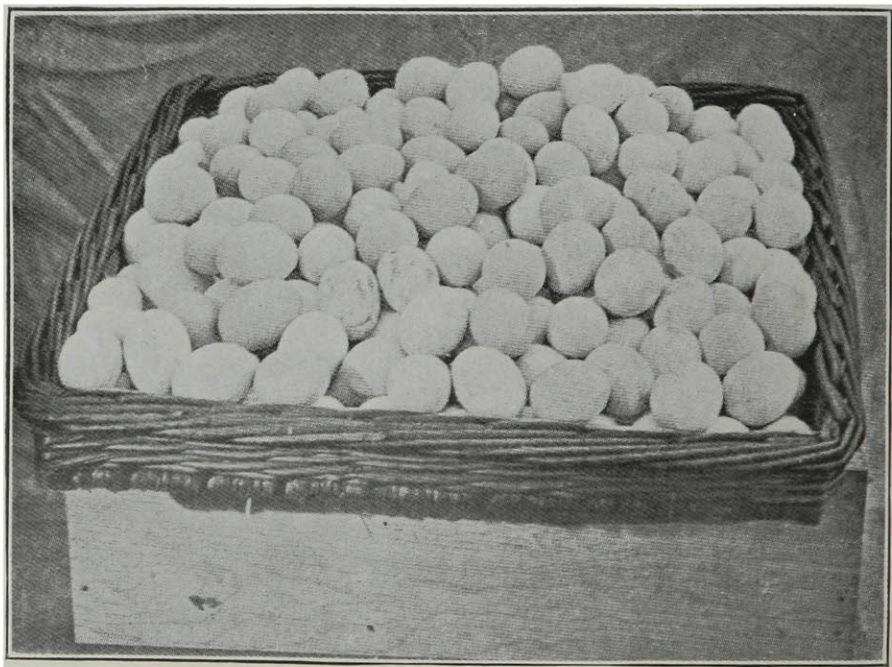
MARKETING POULTRY PRODUCTS.

A large part of the profits in poultry-keeping depends on the marketing of the products. The poultryman must be a good salesman as well as a good raiser of poultry. He must have good markets to begin with, or know how to make them. With high-grade products

that somebody wants, and that most people will not take the trouble to supply, a high-class trade can be built up through skill and tact. The nearer the producer can come to the consumer in selling his products the higher will be the price realized and the less will be the labour and expense of marketing. The producer should strive to eliminate the middleman. The extra price per dozen which is paid for quality is almost clear gain. There is fair profit only in producing eggs and other produce at regular market prices. The largest

terial to enter the egg. If the egg is laid in filthy nests or is packed in unclean cases, it soon becomes tainted and unfit for use.

The egg is at its best when just laid, and the longer it takes to place it in the consumer's hands, the less it is worth. Eggs, when prepared for market, should be spotlessly clean. They should be packed in clean cases, of which the thirty-dozen size is preferable. Absolutely clean fillers and cardboards should be used. The quality of the eggs should be unquestionable. It is



COUNTRY EGGS AS DELIVERED TO THE GROCERY STORE.

profits must come from superior marketing and from special market advantages in selling eggs and other produce.

MARKETING EGGS.

In one of the illustrations are shown "shuffled" eggs from a leading grocery store. By shuffled we mean that the eggs were in no way selected. Dirty eggs are in evidence. Poultrymen should never send dirty eggs to the market. The shells of the eggs are very porous and allow gases and bac-

teria to enter the egg. If the egg is laid in filthy nests or is packed in unclean cases, it soon becomes tainted and unfit for use.

The egg industry in Denmark has been enormously improved owing to the application of the principle of co-operation to the collecting, grading, packing and export of the eggs.

MARKET REQUIREMENTS FOR CHICKENS

Fattened chickens when prepared for the consumer should conform to the following market requirements:—

The dressed chicken should present a neat, plump appearance.

The preferable weight is about 4 lbs. Plump, crate-fed chickens up to the weight of 5 lbs. are more readily disposed of than heavier ones.

The shape of the breast should be long and broad, to give a well-meated appearance.

The legs should be as short as possible, indicating the low, blocky type.

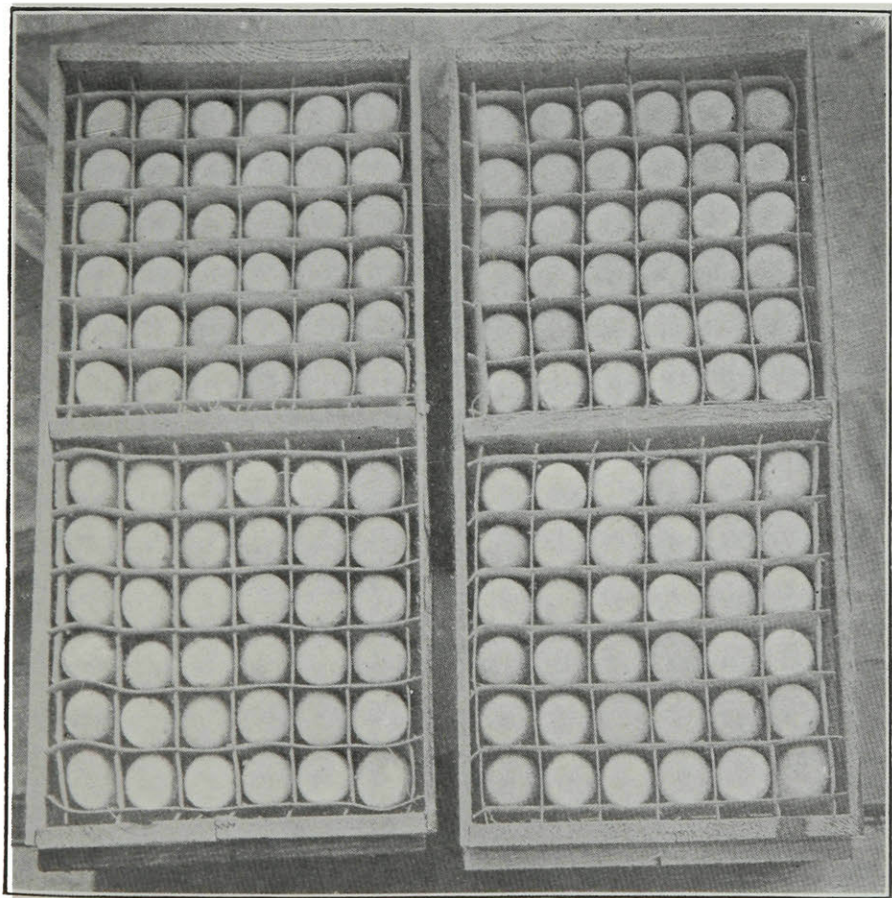
The colour of the flesh should be white, and the grain fine.

The minimum of bone and offal are two important factors in the best grade of marketable products.

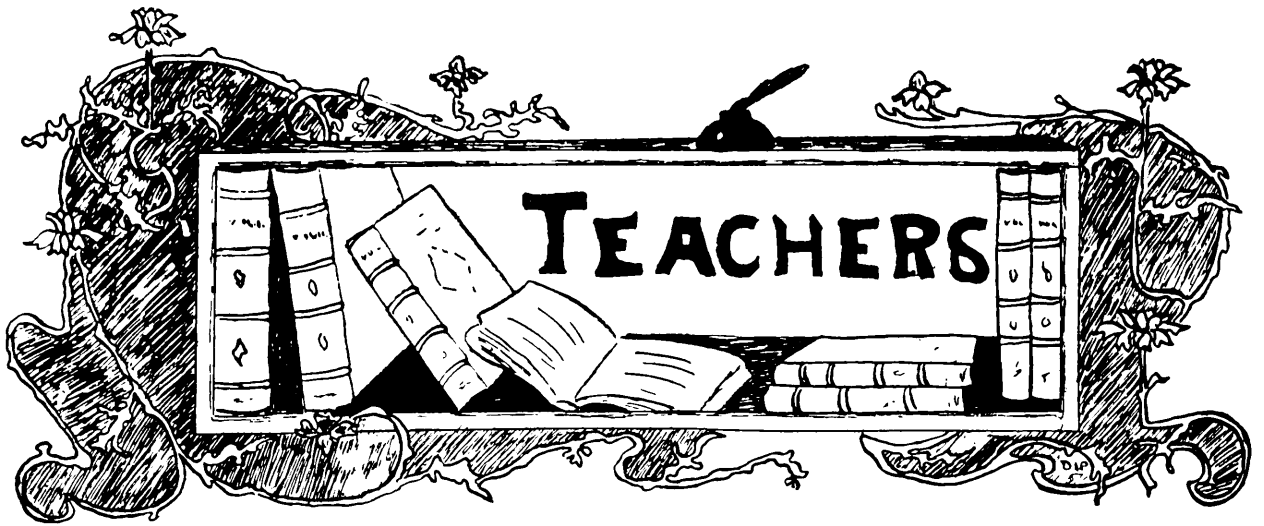
Do not market lean chickens. It is an unprofitable business both to the producer and the consumer.

CO-OPERATION.

There has lately been formed through the instrumentality of Prof. F. C. Elford, of the Macdonald Agricultural College, a Poultry Producers' Association in Eastern Canada, based on the co-operative system. They "do not hope at first to revolutionize or change the whole poultry industry," but they do, nevertheless, hope to remedy certain conditions which are greatly to the disadvantage of the industry as a whole.



THIRTY DOZEN EGG CASES, USED IN SHIPPING LARGE LOTS OF EGGS.



The Practical Side of Physical Training in the Public Schools.

By MARTHA M. SCOTT, Physical Director, Fairmont School, Montreal.



MUCH has been said and written and, no doubt, much still remains to be said and written theoretically, on the value of physical training, but in this short article the writer will confine herself to the aspect of this subject, which has come under her own observation in the public schools of Montreal.

As lately as fifteen years ago, nothing in this direction had been undertaken in this city. To anyone who has had the pleasure, during the last few years, of being present at the closing exercises of the gymnasium in the High School, for instance, it must seem incredible that so much has been accomplished in such a comparatively short time. The splendid physique, the agility of body as well as of mind, the complete control and poise exhibited by the young people would appeal to the most casual observer. At the present time, all the Protestant schools of the city have prescribed definite courses along this line, every child spending at least

one hour per week in the gymnasium under a specialist, besides the simple freehand exercises, which all teachers employed by the Board are supposed to be able to give. In several of the Catholic schools, also, work of this kind has been undertaken, and no doubt, before long, all of their schools will have fallen into line.

The question may be asked as to the necessity of such work; the answer being, that in the city especially, where life is strenuous and children are being brought up under more or less artificial and unwholesome conditions, exercise of any kind is frequently neglected; besides, in both city and country, scholars are often met who care little for outdoor sports, such being generally the very ones who most need such exercise.

Education along physical lines is not a mere fad of specialists but aims (along with mental education) to produce not only "a sound mind in a sound body," but a nimble, agile mind in a nimble, agile, well-developed and

healthy body, fully under the owner's control.

How, then, do we achieve such results? We endeavour, by careful and regular drill in certain diversified movements of the body and by various exercises with light apparatus, to produce control and agility, aiming always to have a well-aired and bright gymnasium, in which to carry on the work. Physical training also includes the teaching of proper hygienic living, the necessity and value of fresh air and sunshine in the home and the great importance of personal

Second, in discipline.—It is the testimony of many of the principals in our schools, that after the introduction of physical training to the curriculum, the discipline of the school has very noticeably and materially improved. The habit of prompt and unquestioning obedience, without which the work in the gymnasium could not be carried on, is a habit which is not left behind in the gymnasium. It enters into the children's nature and becomes a part of their lives, with beneficial results to themselves and to those around them.



PHYSICAL TRAINING AT MACDONALD.

cleanliness. In many cases, where facilities for the latter are not available in the home, we provide such in the school and insist that they shall be taken advantage of by those requiring it.

The results, then, of a course in physical training should be manifest in several ways:—

First, in development of the lungs, by breathing exercises and by a proper carriage of the head and shoulders; of the muscles, by special exercises for the purpose; and of the whole physique, by regular and systematic drill.

But apart from the benefits which the physical and moral nature receive from our physical training course, there is another which is altogether delightful to the child. I refer to the introduction into the schools of a well thought out and carefully planned scheme of games, which are conducted in the gymnasium under the director in each school. Many of the children in city schools, particularly in the poorer districts, have never learned to play and have very little pleasure or happiness in their lives. To see the enthusiasm with which these games are

taken up, the unalloyed pleasure which learning to play them gives, to hear their ringing shouts of joy and see their beaming faces is a revelation and a delight to any lover of children. Aesthetic dancing steps are also taught and tend to produce gracefulness and elegance of carriage, besides being a source of gratification to the learners.

I may say, that all the faculties for physical training provided for out of the public funds in this city are being taken advantage of to their utmost capacity. As soon as the necessary funds are available, no doubt the School Commissioners will gladly provide swimming baths, and no child shall be considered to have received a proper public school education until he or she is able to swim at least one hundred yards. I trust that before long this very important department of physical training will receive the attention it deserves.

In conclusion, I am happy to state that Montreal is far in advance of the rest of Canada with regard to the importance attached to, and facilities provided for an organized and definite course of physical training in the Public Schools. Several of the other Provinces are taking the matter up in a more or less half-hearted way, while others are considering the question of accepting the terms of the Strathcona Trust, which offers a certain sum of money to each Province making provision for physical training, provided the Government of such Province agrees to provide the rest of the necessary funds. We hope to see the day, and that not far distant, when physical, mental, and moral training shall be considered equally necessary in our Public Schools, and the children of our land shall no longer be handicapped throughout life by the weakness or lack of development of any part of their nature.

The Library.



LIVING to the magnificent generosity of Sir William Macdonald we possess one of the finest College libraries in Canada. As an artistic production it is almost perfect. The reading room is built on a spacious plan, its sturdy pillars pressed into place as it were by the massive decoration over head. The heraldic stained glass windows, with their vividly coloured crests, add a touch of brightness to the room which itself has every convenience for readers.

In 1907, the books from the McGill Normal School were transferred to

Macdonald College; but, contrary to the prevailing impression, these form but a small percentage of the present library, which now numbers nearly seven thousand volumes. Dr. Harrison, for many years librarian at Guelph, used his ripe experience in retaining and eliminating the old Normal School books as well as in selecting and purchasing new ones; and, aided by the heads of the different departments, he has accomplished this difficult task most advantageously for the three schools. To Dr. Harrison also are we indebted for the system of bulletin cases which are the unfailing resort of the Agri-

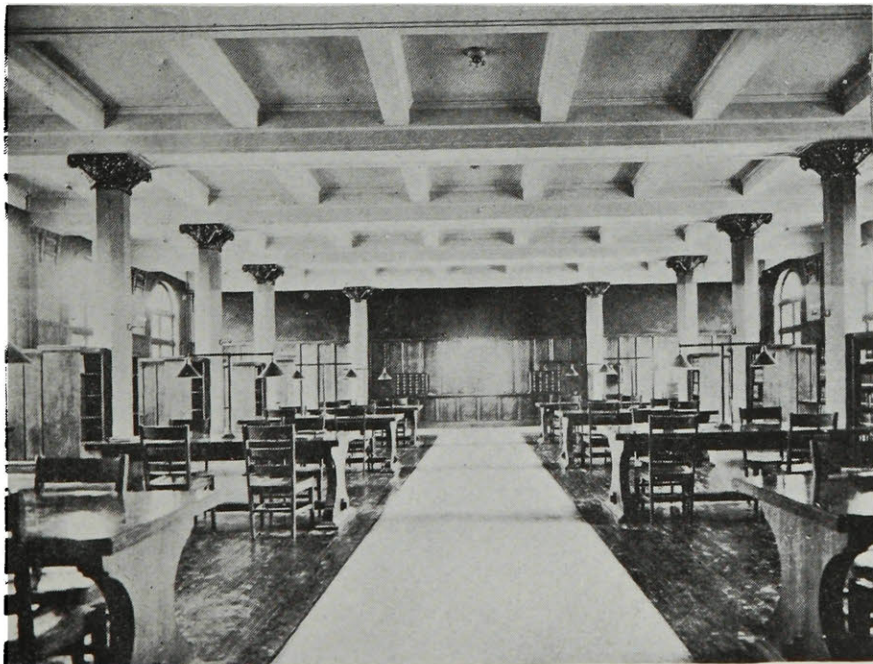
cultural students and the admiration of visitors.

Each alcove of the reading room serves its distinctive purpose, and contains the current literature on some particular subject. Considering this, may we suggest, as the young men are too gallant to assert their rights, that those not particularly interested in the *Breeders' Gazette* or the *Country Gentleman*, as the case may be, would refrain from using those particular alcoves.

On the shelves of the reading room and easily accessible to all, are numerous text books and reference books of every sort; and, needless to say, the Librarian is always glad to be of service to those desiring information. The subject catalogue (now in process of completion) and the authors' catalogue, form a real means of locating material either in the reading room or stack room.

New reference and text books are to be added to the department this year, but funds for fiction are not available. It was suggested in the last issue of this Magazine that a custom be established whereby every man upon leaving the College should present a book of fiction to the library. We suggest that every student at his or her departure donate to the library some book, though not necessarily of fiction, for this division is naturally of secondary importance at a College. Moreover we already have the complete works of at least our greatest novelists. Any work bearing on Science or otherwise, if sanctioned by the Librarian, would be a most welcome contribution; and not only would this benefit the future generations at Macdonald College but it would also form a lasting memorial to the giver.

E. L. R.



THE LIBRARY, MACDONALD COLLEGE

The Haunted House.



YES, he was a Freshman, and a green one at that. But his freshness and verdure were ruthlessly torn from him by unrelenting Sophomores. Strange, yet true, was this his experience, and after undergoing it he rose the morrow morn a sadder but a wiser man.

He was the eldest son of a well-to-do farmer. He came of a family which was very practical except for one superstition, namely, that every generation

from the seat of his ancestors, he had almost forgotten the family bugbear.

But one night, at half past eleven, he was seized by a fit of restlessness. He rose from his bed, enveloped himself in a College blanket, and looking like a harrier on Sports' Day between the events, dropped himself from his window and sallied forth. Drawn by some mysterious influence, he directed his way to the river front. Arriving at the road, his footsteps were turned eastward by some force external to himself.



THE HAUNTED HOUSE, BAIE D'URFÉ ROAD.

a ghost appeared to the eldest son when he was eighteen years of age. Now, he was long past eighteen; in fact, he would be nineteen in December. No ghostly apparition had ever troubled him and he was wont to look with disdain on the tradition, which he had heard since he was a little boy five years old. Anyway, what had he to fear! He was sure he had never done anything to court the unfriendly attentions of ghosts, and now he was far

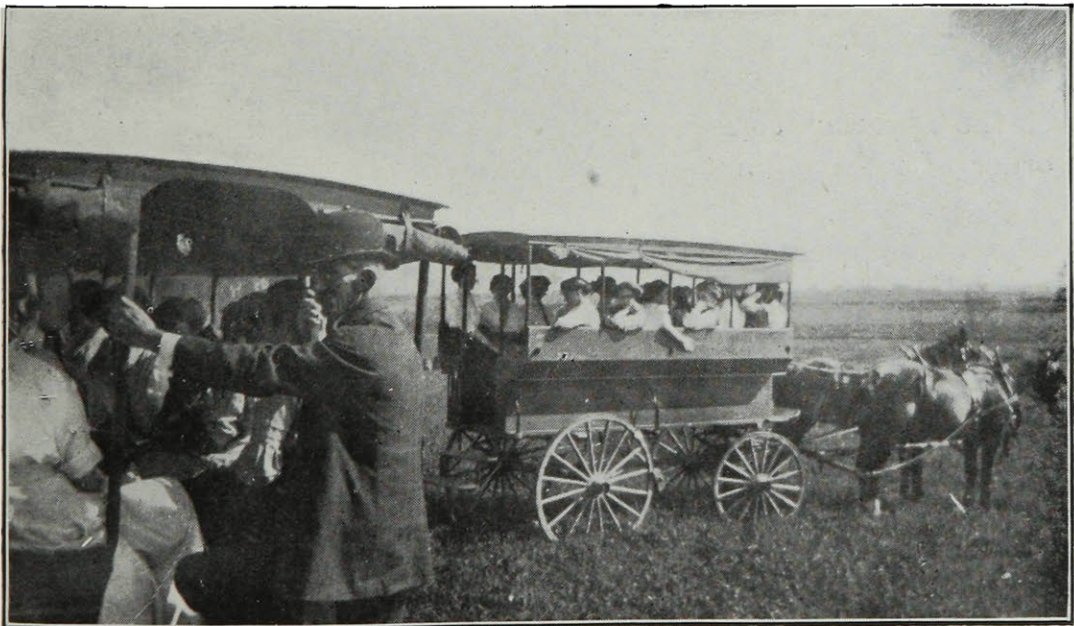
He walked along for some time enjoying the scenery and the solitude. At last he began to feel that the blanket was not so warm as it might have been and he wished to retrace his footsteps. But he found that he was powerless to do so. Suddenly it flashed upon his mind that he must be approaching the Haunted House, which he had secretly feared. Now all the gruesome tales which he had heard about it presented themselves before him in a fearful array.

Cold shivers ran up and down his back, and there was a lump in his throat which he knew was not tonsillitis. Just at this moment he came in sight of the old house, ghastly in the moonlight. A flash of light appeared in one window, disappeared, and as quickly reappeared in another. The superstition of his fathers, which he had scorned, recurred to his mind and redoubled his terror. His eyes were bulging from his head; his knees quaked. Drawn on by some magnetic force, which he could not resist, he entered the house, ascended the stairs, and entered a room. But the moment his feet crossed the threshold of the door, a piercing shriek rent the air. A light flashed before him and he dimly saw the features of a Sophomore. His knees gave way be-

neath him and he fell into a swoon, but immediately regained consciousness as a fleshless hand seized him and thrust him through an opening in the wall which closed after him.

Two courses stretched ahead of him. He wildly rushed down one in a vain endeavour to escape the apparition. But it appeared before him, beckoning him on with a bony finger. Almost insensible by this time, he stumbled on. Soon he heard the sound of water, at first low and gurgling. The sound grew louder and louder, and suddenly a rush of water engulfed him. He rose to the surface, awoke with a start and found himself struggling in the deep end of the swimming tank.

It was at this point that he realized that the most fearsome part of the dreaded initiation was accomplished.



"A LECTURE ON THE FARM"



The Exhibit.



ON DAY, December 19th, 1910, was a busy day on the second floor of the Main Building. The green and white uniforms of the Science Girls, Seniors, Juniors and short course were flying hither and yon, in what might appear to an on-looker as "confusion worse confounded," but out of the apparent confusion was to come order; for these "hurryings to and fro" were but the preliminary steps towards the perfecting of the exhibit set for that afternoon. At one o'clock the Cookery, Sewing and Laundry Class Rooms were open for the faculty, students and visitors, and the exhibit in each proved most interesting, and showed that neither teachers nor pupils had been idle since the opening of the Collegiate year.

Has it ever occurred to you, gentle reader, how dependent you and I are on the ability of the individual who guides the destiny of the kitchen? Alas! that there should be so many cooks, so many kinds—good, bad and indifferent.

"We may live without poetry, music and art;
We may live without conscience and live without heart;
We may live without friends, we may live without books;
But civilized man cannot live without cooks."

Be calm, friend. You and I and "civilized man" generally can continue to live for some time yet, for the race of cooks has not run out, at least not at Macdonald. That fact was fully demonstrated in the three Cookery Class Rooms on that Monday afternoon for the long tables were fairly groaning, forgive the trite phrase, under the weight of beautifully cooked and daintily served dishes. Under the skilful guidance of Miss Fisher and Mrs. Rutter, the three classes above mentioned had prepared and cooked all kinds of dishes, anyone of which "would tempt a dying anchorite to eat, and having eaten to exclaim, 'Fate cannot harm me, I have dined to-day'". Cakes there were of all kinds, from the stately

Christmas Cake with its beautiful decorations of snowy white, through the many varieties and degrees to the humble but good ginger-bread, the lightest of bread and rolls, clear and cream soups, meats, cooked in various ways—tender cuts done to a turn and tough cuts treated in a way that made them distinctly palatable, with the added advantage of cheapness in a time when the price of meats continues to soar; in fact, nothing that found a place on a menu card had been forgotten, even a dish of oatmeal porridge finding a place. Nothing, apparently, is too

that, the perplexed housewife must have found many good answers to that perpetual question:—

“What shall I have for dinner?

What shall I have for tea?

An omelet, a chop or two

Or a savory fricassée?

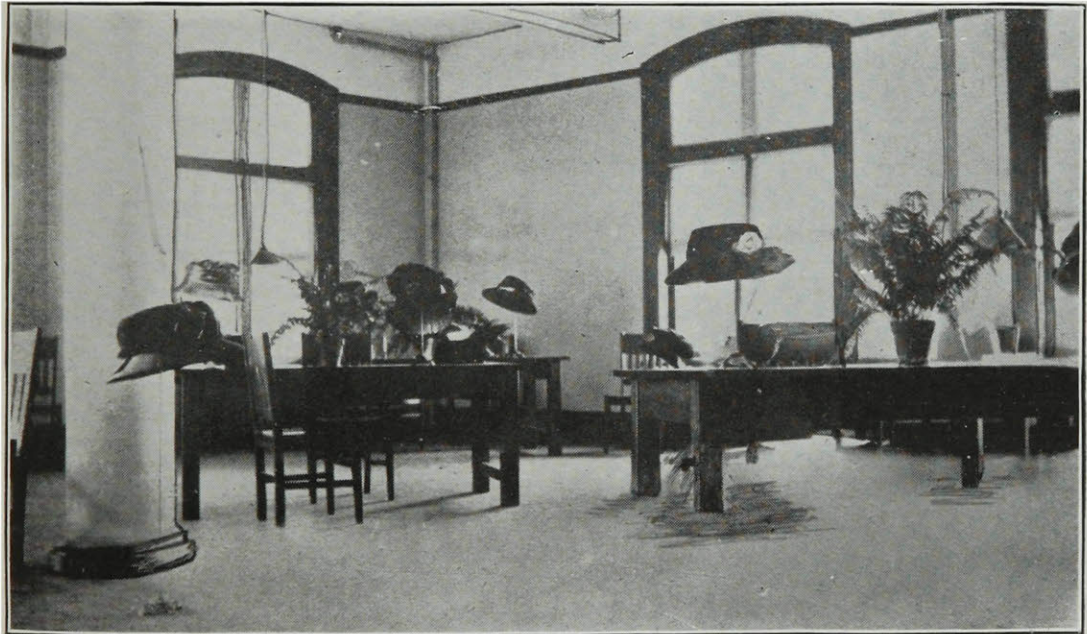
Dear! how I wish that Nature

When she made her mighty plan

Hadn't given the task to woman

To care for hungry man.”

Along the corridor of the Sewing Class Room, Miss Loveridge, assisted by several of the Science students, was



A CORNER OF THE EXHIBIT.

lowly in the food intended for man, for Household Science to pass by, but the best methods are found and taught for the bringing of that food to its highest perfection. The recipe, method of preparing, composition and food values of the ingredients and price, carefully written out, accompanied each dish. The whole exhibit was intended to show, and it did not fail in its mission, that the science of cooking did not stop at the mere cooking but went to the root of the matter and found out the whys and the wherefores. Besides

demonstrating the advantages of a course in sewing. This room was looking very pretty with many shirt-waist dresses shown off to advantage on lay figures, while on the tables were models of First Grade Sewing and many beautifully trimmed hats. The sewing in every case was of the very neatest, of that you can rest assured; if it was not the best the student could have produced, it never would have been there. The dresses looked as if they had been turned out by the skilled fingers of an experienced dressmaker

instead of by girls, many of whom knew nothing of garment making and practically nothing of sewing, at the first of September. The hats were in decidedly good style without being extreme or over trimmed. Good taste was displayed in the combinations of color and materials used. The prices were astonishingly low—in the vicinity of five dollars, and some even less, and were a revelation of the immense profits to be reaped in the millinery business. In a regular shop not one of the hats would have sold for less than five dollars, while several of them would have brought anywhere from ten to twenty dollars.

In the Laundry Class Room, where Miss Hill holds sway, the proper methods of washing, ironing and folding garments were shown. Each garment that was white was beautifully white and the coloured garments had lost none of their pristine freshness. A servant of the old, faithful type, so rarely met now-a-days, was wont to say, when her washing particularly pleased her: "Them clothes of mine jest glisters to-day." While no one was quite sure what she meant by clothes glistening, we always knew she meant that her highest perfection in washing had been reached.

Certainly, the highest perfection in washing was reached in the garments displayed here. Delicate laces had been treated in such a way that they looked as if they had never made the acquaintance of water, soap or an iron. All the little touches that make for perfection are secrets of the trade and can only be learned by attending the lectures in laundry work and by doing some of the practical work as well.

Altogether the exhibit was a grand success and judging by the comments of the many visitors it was surprising to know just how far the course went and just what was taught the students in Household Science in those three departments. Everywhere was the evidence of good workmanship demanded and attained. When a girl, by patience and hard work, acquires the ability to do good work herself she has also acquired the ability to appreciate it to the full in others. Knowing, then, what good work means and the time required to accomplish it, she should be the more willing to pay for it, and in that knowledge will be found to lie, for the women of the future, the power to cope successfully with that terrible bug-bear of Canadian women—the Domestic Problem. J. A. F.

The Art of Becoming Dress.

Modern Dress is one of the Lesser Arts.



THE desire to be well dressed is innate in every normal person, but how many fail to attain the pleasing picture so much coveted! Most people can discriminate between a well-dressed person and a poorly-dressed person, but few can give reasons for their conclusions.

This desire to be well dressed is most commendable. It is our duty to our fellows and to our home circle.

The character of the dress very largely bespeaks the character of the wearer. This fact alone should stimulate us to make our dress express our best selves in every particular.

Since it is so plainly our duty to look as well as we can, what are the dominant features to be considered if we would be becomingly costumed.

Among the many things that make for good taste in dress, there is none more important than the question of colour. We are so constituted that colours greatly influence us. This being true, let us call up a mental image of ourselves and also an ideal image, and choose those colours that suit us best, not the colours that we like best. In choosing a colour, consider the hair, the skin, the eyes, and the general mien.

Having taken an inventory of our individual type, it is quite an easy matter to select a pleasing colour scheme, if the aesthetic sense be developed. However, in many, the colour sense is utterly lacking; if so, it can be supplied by training. First of all, avoid startling colours,

colours not seen in nature to any considerable degree. If sparingly used, bright colours may be used most effectively, but it takes an artist to introduce them. Another rule of paramount importance to the amateur is never to mix colours. Everything that we wear should harmonize. A large majority of the poor effects in dress are due to the use of too many colors.

When we have permanently fixed in our minds the fact that the choice of colour does more to make or to mar a gown than any other one



SCIENCE TEACHERS.

thing, we have started well in the art of becoming dress.

But there are other points to be considered in this art, foremost of which is the correct line, the becoming line. What is this becoming line in dress that experts regard as so essential? It is the conforming of the dress to the ideal figure by concealing the defects and accentuating the good points.

To attain beauty of line, we must have a thorough knowledge of our individual type, and choose our style accordingly. We should not choose the mode we most admire, but that which is best suited to our own individual self. And right here is a golden opportunity for the expression of our best selves. What a woman lives, she will express, so that the gown is really an indication of the character of the wearer. Never pretend to like what you do not, simply because it is the latest mode. Make Fashion the slave, not the Master. Avoid fads and extremes. Adapt the latest mode to your own needs and to your own personality. While we must follow the tendencies of the prevailing fashion, if we would be well dressed, it is quite possible to modify them to suit every individual type.

A dressmaker who has an instinct or a trained sense for beauty of line, can evoke grace in almost any figure; but if she be lacking in this sense, she will distort perfection. The short, stout person should avoid frills and flounces, sharp outlines, and horizontal lines; every important line should suggest length. For the tall, slender sister, horizontal lines are good, and she may

wear, with grace, the frills and flounces denied the stout sister.

Choice of materials plays a most important part in the artistic scheme of our costume. Materials suitable for the stout woman might be quite ugly on the slender woman, and vice versa. In short, we should not choose fabrics that call attention to themselves as separate from us.

Another factor that enters into the art of becoming dress is a strong regard for the eternal fitness of things. The gown must suit the occasion. It should express beauty and utility. It should be a combination of a pleasing colour scheme, beauty of line, and other detail, with our practical needs.

And last but not least, let us not emphasize our age by dressing too youthfully. The frills and bows that enhanced our beauty at fifteen, are most unbecoming at thirty. While we may hypnotize ourselves, the general public, not so easily deluded, reads our secret longing to be young in our affectation of youth.

In dress, as in every thing else, the most valuable asset is common sense. With this as a foundation, art appreciation, and all other requisites are easily developed. MISS LOVERIDGE.



SCIENCE FRESHMEN.

Manual Training.



OUR whole country from East to West is alive to the question of technical and industrial education. The needs and conditions are being carefully investigated by a Royal Commission. Governments are asking for appropriations for the work; and almost every newspaper devotes space to its discussion.

From the industries the demand is not more for skilled workers than for industrial intelligence, ability to appreciate conditions before and beyond the task of the moment.

There is often a confusion between the term industrial or technical training and manual training; but while closely allied, and while manual training incidentally lays a good foundation for the others, in its aim and purpose, it is distinct from them, being broader and more general in its scope. For, while both technical and industrial schools make use of education for the cause of the industries, manual training utilizes the industries for the cause of education in its broadest sense.

A well planned course in manual training aims (1) to make the results of all teaching more permanent and definite by the use of motor activity. (2) To develop habits of efficient, thoughtful, well planned, economic doing, and a sane confidence begotten of experience and information. (3) To cultivate the appreciation of beauty and excellence in constructed objects.

The materials used are varied—wood, metals, card, leather, textiles—and the manipulation simple or intricate, according to the abilities and circumstances of the individuals. In one course the educational aspect may be

specially emphasized, in another the cultural, the development of appreciation, while a third may devote great attention to the utilitarian side, and attain a high degree of manual dexterity in some art.

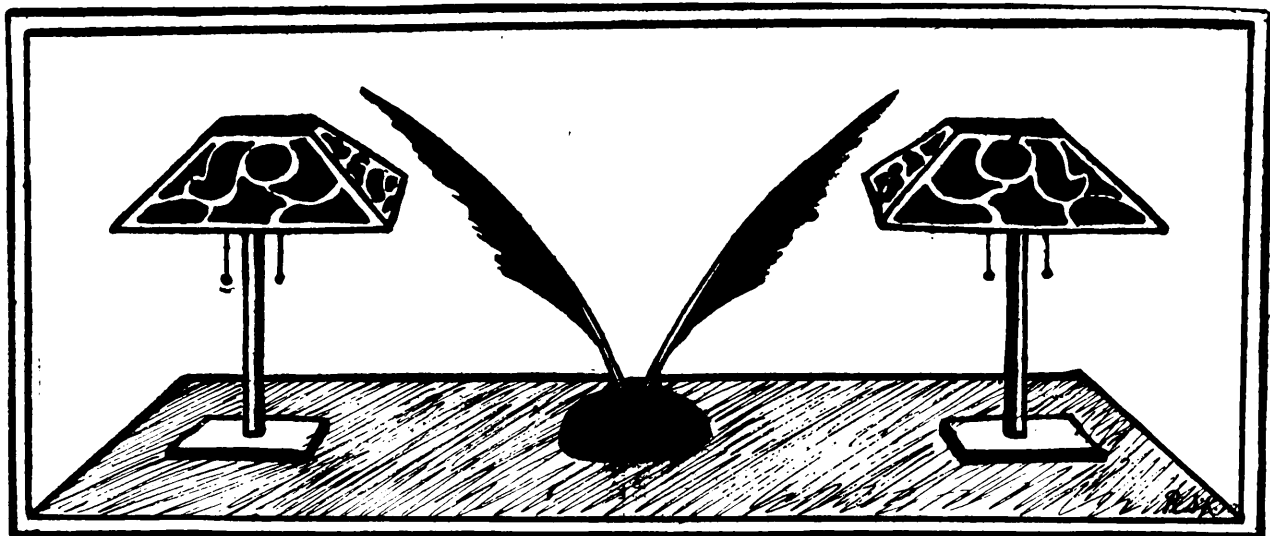
This is well illustrated in the various classes at Macdonald. Elementary classes from the day school may be seen, examining, planning, and constructing with the utmost care, under the inspiration of an absorbing interest, cardboard boxes, trays or toy furniture, certainly not things of value, but gaining in the work definite ideas of form and proportion, habits of neatness, accuracy, patience, and perseverance in accomplishing a purpose.

Students from the school of agriculture will wrestle with problems in framing or construction or in forging, involving the application of mathematical and mechanical principles, physical properties of material, and a degree of skill in manipulation not to be despised.

A Household Science class, engaged upon making some article of household use, a box, a frame or piece of furniture, will receive not only the benefit accruing from the training and the resultant skill, but will acquire an appreciation of fine lines and good construction, of beauty of proportion and appropriate design, that are invaluable.

Appreciation comes with definite knowledge of an art, and involves the feeling gained through practice in that art. This practice gives a solid basis or centre from which lines in many directions may be thrown out, fed by study and observation; and the standard of taste placed on a higher level.

Out of the struggle for perfection grows a love of the good. A thing well conceived, carefully executed, and made beautiful according to knowledge, must be a step toward better thinking, and a more complete life. L. W.



Under the Desk Lamp.

AN AWAKENING.

THE few weeks during which this Magazine is in the hands of the Printer will be exceptionally interesting from the College point of view and it is unfortunate that the many activities which culminate then, cannot be recorded in this number. "Bluff"—that great friend of lazy students and Professors, is a great institution, but although it would stretch our "bluffing" abilities to the limit, we think we could write an account of many of these events before they took place. The masquerade, for instance, would be simple. The U. L. S. play should also be easy, though we have not passed through that particular experience described. We could even prophesy the results of the trip to Guelph with fair accuracy. These few weeks should prove successful ones and definitely prove that Macdonald has awakened from her apparent hibernation.

O. A. C. AND MACDONALD

This trip to the Ontario Agricultural College at Guelph is a most important event in the history of the College, not only from the Athletic point of view, but from the standpoint of the College as a

whole. We have tried to emphasize, in another place, the necessity for mental co-operation amongst the inhabitants of all rural districts, and we think that a closer connection between the O. A. C. and ourselves cannot fail to further that end. The aims of the two institutions are so similar that there cannot be too much inter-communication for the welfare of either. Three teams are being sent—Hockey, Basketball and Baseball. We have many examples before us at Macdonald of the type of sportsmen turned out by the O. A. C., so we are assured of a warm reception—on and off the field of play. But whether we win or whether we lose (and when this Magazine appears, the results will be things of the past), the meeting cannot fail to promote a good understanding and a friendly spirit between the two Colleges.

THE COVER.

Readers will note that the cover of this number is the same colour as the first Magazine. It is the intention of the Board that this shall be adopted as the permanent colour of the MACDONALD COLLEGE MAGAZINE. There are three good reasons for this step. Firstly,

then, though our readers may doubt it, when gazing at a Sunday display of hats, the number of colours is limited, and the number of suitable colours very much so, which is more easily believed. Secondly, those whom we have asked have been unanimous in their opinion that this colour is the best and most suitable, representing as it does at least one of our College colours. And thirdly, it is our opinion that a magazine becomes well known, and recognized, as much by the colour and general appearance of its cover as by anything else.

A GOOD BEGINNING.

In the Horticultural section it will be seen that two of our Agricultural students have been giving addresses and reading papers before some of the Quebec Horticultural Associations. We cannot but express our respect for these men, who have taken a large amount of trouble to disseminate some of the knowledge they have already gained, while most of us are intent on nothing except gaining more of it for ourselves. Such men and actions are what will make the College known and popular in Quebec.

LITERARY SOCIETIES.

We should like to impress our fellow students in Agriculture with the great

benefit which may be derived from taking an active part in our Literary Societies.

The work of this college is to train leaders, men who, when they go out into the public life of their community, will be able to disseminate to their fellowmen, both in public and private, the fund of knowledge they have acquired.

To accomplish this a man must be able to think clearly and quickly, and to express himself intelligently and forcibly.

It is for the purpose of developing and training this power that such societies exist. It is in them that a man learns the primary principles of public speaking and paves the way for greater things. He should look upon them as a part of his college training and take an active part in all its functions. It is formed for him and not for the other fellow, and each man should avail himself of the training they give.

The active interest taken in our Literary Societies shows that for the most part our students are availing themselves of this opportunity, and we trust they will reap great benefit from so doing. We also trust that those who perhaps have not realized the importance of this question will soon avail themselves of this opportunity of developing their speaking ability.



CORRESPONDENCE

To the Editor

MACDONALD COLLEGE MAGAZINE.

Dear Sir,—Perhaps under the heading of correspondence you will allow me to call the attention of your readers, especially the men in the School of Agriculture, to a sixteen page pamphlet which has been circulated recently throughout parts of Canada. It is called the "Problem of the Indifferent Farmer," and is the reprint of a speech delivered by C. C. James some weeks ago.

Perhaps no other man is watched with such great interest by a large number of Canadians interested in the future of agriculture as is this Deputy Minister of Agriculture for the Province of Ontario. Many of his recent speeches have been remarkable for their clear insight into the problems affecting the needs of the present and those which are very likely to present themselves for solution in the near future.

Parts of this booklet have been quoted and commented on by the agricultural press of late and I will not therefore trespass on your space by quoting from it, but I should like to make a suggestion, if I may, regarding the attitude of an institution like Macdonald College through its teaching staff and student body towards problems of this character.

It may be said, I think, that a problem of any kind arrests the mind of a student much quicker than statements of facts. Likewise there are, I believe, in the fields of the various sciences many problems waiting to be solved by the future generations of agricultural scientists.

As a rule the professors do not forget to emphasize this fact before the student. And rightly so. Now, while I am well aware that it would be quite impossible to introduce the discussion of a problem like that treated of by Mr. James into some of the courses, I wonder whether there are not others in which problems, which after all are of fundamental importance to both the agricultural student and the citizen, could be discussed with great profit? Farming of the present day will be benefited immensely by having returned to it from our agricultural colleges men who are as keenly interested in the social as the scientific problems of the complicated calling of the farmer.

It may not be the direct duty of any particular professor to discuss with his students such a problem, but may it not be his privilege to do so? The broadcast distribution of a pamphlet like this would do good, yet it is, as you know, Sir, a fact that very few of the students of our agricultural colleges have or make the opportunity to become acquainted with problems like this one of the "Indifferent Farmer," and which are so fundamental to the future of the calling in which they aspire to be leaders. I would add, if I may, that I believe that such problems should be brought before the men of every year in our colleges and not only before those few who reach the fourth year. Thanking you for space,

Yours sincerely,

X. Y. Z.

My Summer Holidays.



I HAVE been much gratified and pleased to see that the desire for accurate information upon which I reckoned when I wrote the last account of Western life is greater even than I expected. My desire has always been to extend, by means of sober and honest information, the knowledge and information of every body else. So, in spite of the evil insinuations of certain base calumniators that certain details of my recent article were incorrect—in other words that I was a liar—I shall endeavour to put before the intelligent and enlightened readers of this magazine some more of my experiences.

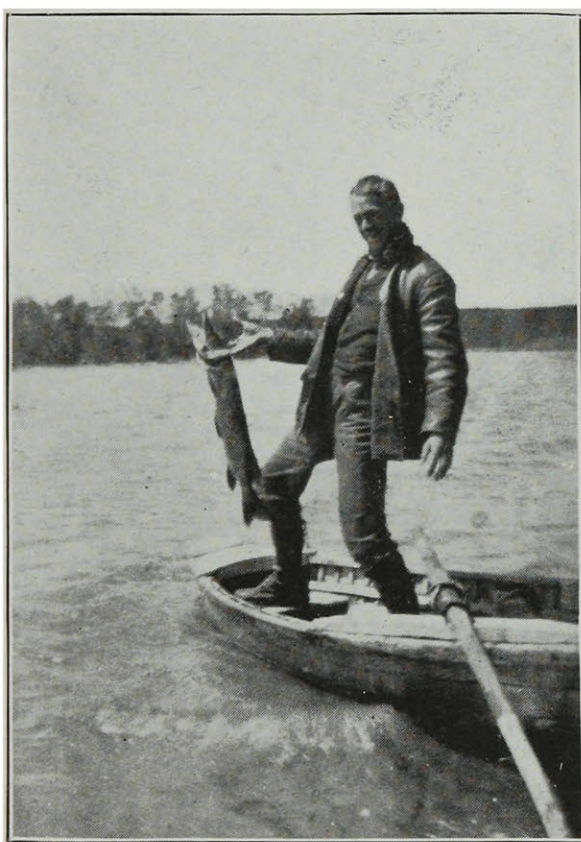
It seems curious that more poets have not written on the delights of sleep. It was one of our greatest pleasures out West, and was also often interesting. Our tent was a small one and we took our rest much like three talkative sardines. The advantage lay usually with the man in the middle. On cold nights we used to have an extra rug which covered us all three, and there was always a considerable difference of opinion as to which of the two outside men had least, and the argument which ensued never brought any decision, except—that the man in the middle had

most. There was always so much fresh air coming in at the edges of the tent that the argument usually resolved itself into a rotary tug of war where each of the two outsiders tried to roll himself up in the rug, but in opposite directions. The result was, of course, a distinct compression of the middle man. And once when we got energetic and each placed our knees in his so-called

waist line and pulled vigorously, he got quite unpleasant about it. What we would have done in those days if we had all agreed I don't know. Somebody always differed from somebody else about something. Many and interesting were the impromptu debates held. Moved Van, seconded Kennedy, that Brown snores the loudest. Motion carried by 2 votes to 1. Moved Kennedy, seconded Kennedy that Van has got too much room.

Moved Van, seconded,

Van, that Kennedy's notion of the equal division of a given space into three parts is deleterious to the public welfare. Moved Brown, that Kennedy and Van do now go to Blazes—Motion lost by 2 votes to 1. The question of who ate the most was always an open one, and, like our beds, was never settled. The total of the amount consumed was, anyhow, enormous, and it was lucky we were living

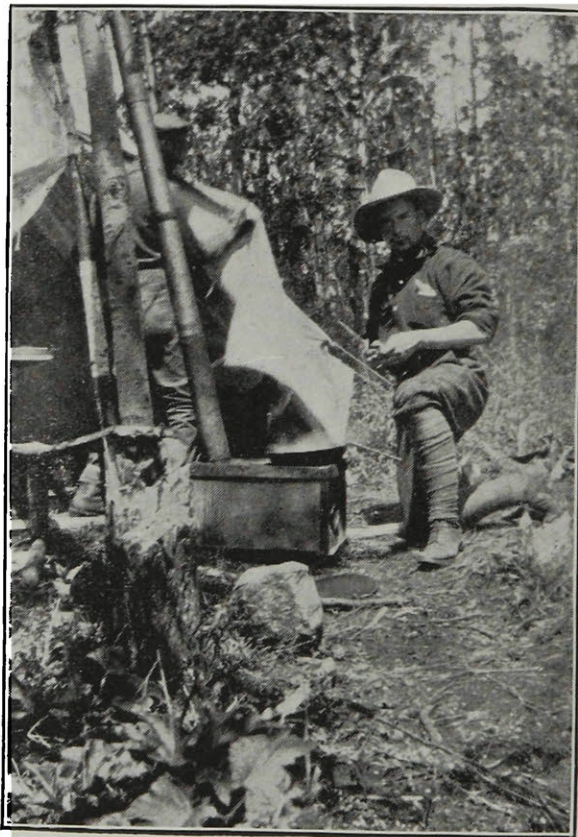


CATCHING.

on the government. We patriotically saved the government what we could by eating the trophies of the chase, when we got a chance. That was the name given to the duck we killed and the squirrel that died. The duck was a brute. For two hours one evening I stalked that duck through mud and water. I killed it by a magnificent shot at over ten yards distance, while it must have been swimming through the water at over three miles an hour, the sun blazing on me full in the back, and a hurricane raging, which in places distinctly ruffled the lake. I bore my trophy back to the camp, looking as modest as I could, and we proceeded to discuss the best method of cooking it. Curiously enough, we all thought alike. That duck was to be roasted. Van proposed some stuffing amidst general approval, and I gained considerable respect by modestly offering to make a little gravy. We had canned peas, we had potatoes, we had an axe, and what else was wanting for the satisfactory masticatory demolition of the duck? That was Friday. The duck dinner was fixed for Sunday. The first dissension arose on the plucking question. We compromised, and each plucked for an hour, without, however, having much effect on the duck. That was a curious duck—it had enough feathers to provide beds for each of us, so we let it rest over Saturday night,

with a grim determination to eat it—feathers and all—on Sunday. Saturday night was hot—very hot. We awoke on Sunday morning to experience a strange olfactory sensation. We discussed it lazily for a few minutes, then Brown, on looking towards the table, drew our attention to the duck. We looked and I distinctly saw it move—it seemed to be in pain. Then something emerged from the duck's side and quietly withdrew again. We dressed silently and binding handkerchiefs around our noses we buried the duck 4 ft. deep, at a distance of 247 yards from the Camp. We dined off canned beef.

The squirrel that died was so unfortunate as to eat a piece of a bannock Van had made. In skinning it I made an important discovery. These College Professors had been wrong. The epidermis was not separate, but really an integral part of the muscular tissue, and in the process of skinning everything seemed to come off



COOKING.

with the skin. I blew the body off my coat sleeve and heaved the skin into the bushes. We had beef soup for lunch.

Fish! Fish! Glorious Fish! They were indeed a blessing to us at this time. They don't need plucking and they don't need skinning. Catching, cooking and cramming were the three processes undergone by the fish we used to catch.

Our next move brought us to a place where there were half a dozen tents of

happy holiday campers from Arcola and we experienced quite a social uplift. Social downfall would suit Van's case best I think. He was sitting one delightful moonlight night, in a delightful hammock, with a delightful girl when the rope broke and owing to the formula : "Force = Mass $\times$ acceleration due to gravity" the pair of them seated themselves on the ground, with a force of about 178,642 pounds. The accident was discussed by the people round the camp fire and unanimously attributed to "too much concentration of weight." Van and the girl put it down to "dis-

man with the most points at the end of the trip should receive a dinner from the other three. This tournament also served another useful purpose. In order to eliminate a certain amount of profanity that had crept into our conversation, we arranged that when anybody was heard to say anything unparliamentary he should lose a point on his "500" score. This had an immediate effect and doubtless saved us from much embarrassment when we got home, by preventing us from bursting out with such words as "blow" or "hang" or "dear me" in polite



CRAMMING.

integration of the supporting ropes, due to age and fraying caused by usage." Brown and I tapped our pocket knives and smiled. At our next station we grew really aristocratic, as by the courtesy of a storekeeper in the nearest town, we were enabled to live in his log cottage.

This was luxury indeed, and here started our famous "500" competition. Every evening the four of us (for we had an extra companion here) would sit down and play "500," the two winners counting 5 points each at the end of the game. We had an agreement, that the

society. What annoyed me in this arrangement, was that Brown and Van were such religious sort of chaps, that they out-voted me and insisted on putting down "Good heavens" and "Oh, Lord" on the forbidden list. As my conversation was punctuated with these harmless expressions, I suffered heavily. I remember one time when I was balancing myself on a stone on the edge of the lake—washing. Van was loafing around as usual and when I dropped the soap and said "Heavens," he remarked : "Point lost."

I turned round to tell him to shut up, and dropped the towel. This time I thoughtlessly ejaculated : " Oh, Lord." Van roared and I almost suffocated in my desire to speak to him without losing points and Van collapsed. I then threw prudence to the winds and told Van my real, honest opinion of him, thereby losing 9 points. But it was worth it.

Another amusement of ours was shooting. We had three revolvers and a rifle between us and how we escaped I don't know. When we tired of throwing our hats up and shooting them, we would go into the house and put all the lights out except one candle, which we would endeavour to shoot out from the other end of the room. This amuse-

ment continued until I accidentally shot Brown's hat off in the dark, which seemed to ruffle him, though if you had seen his hat you would see that he had no cause to complain. Even if the bullet had gone a bit lower, the only cause for worry would have been from the splashing of the bullet.

So long had I slept on the ground, that when I returned to Brandon, after tossing for an hour on a beastly soft bed, I had to get out and sleep comfortably all night on the floor. Even coming home on the boat when on Lake Superior the floor of the cabin seemed the only really safe place, and it was not till I once more lay upon a College bed that I was really comfortable and happy.

My Experience in the Art of Ski-ing.



It was my first winter in Canada, and I was prepared to enjoy it to the utmost. The keen frosty air which greeted me one morning in early November filled me with delight, and as I turned up my collar I thought "What jolly great lies these fellows have been telling me about the terrible cold of Canadian winters. Why, this is splendid!"

I resolved then and there that I would indulge in all of the winter sports, and although I noticed that before the winter was over the thermometer registered several degrees lower than it did on the day of which I have spoken, I clung firmly to my resolution.

My first intention was to devote a month to skating, another to snow-shoeing, a third to tobogganing. After careful calculations, I found that if I followed this course the end of May would find me a good, all round sport, and I judged that by that time the winter would be pretty well over. By disclosing these good intentions to my friends, I made myself the subject of rude, boisterous jests, and, after second consideration, I decided to master one sport thoroughly, and leave the rest alone.

But which should it be? I did not fancy the idea of learning to skate, somehow. Ice is such horribly treacherous stuff, don't you know, you never can depend on it to stay under your feet; tobogganing would be all right, if only one needn't walk to the top of the hill again; snow-shoeing was far too tame for a person of my daring disposition. Ski-ing appealed to my taste. I had always viewed with envy the person

who sped down hills like a winged creature, and glided over snowy plains with graceful ease. Skis were in themselves so gracefully simple, with none of the intricacies of skates or snow-shoes, which must always be fastened on securely, while with skis one has only to slip the foot through a strap, and presto! the thing is accomplished. Certainly ski-ing was the sport which should occupy my recreation hours for one winter at least.

Accordingly I invested in a pair of skis, and carried them home in triumph. In the excess of my joy I forgot to consider the length of my new possessions, and had the misfortune to strike an elderly gentleman with a violence that hurled him into a baby sleigh containing twins, and some time was spent in explaining circumstances to the interested parties, but this was but a small cloud in the heaven of my happiness. The snow was just right for ski-ing, so every one said, and the tiny points of gold which were already appearing in the distant azure would soon look down on the merry ski-ing party of which I should be a member. Oh! the joy of that thought!

With what anticipation did I don countless wraps (for I knew the necessity for guarding against the bitter cold which prevails in these regions) and sally forth with my new treasures tucked carefully under my arm! The merry party of my imagination consisted of three boys who were performing various feats in ski-ing, all of which appeared very simple. "I say, my boys," I remarked, "can you tell me where I could learn to ski to best advantage?" After several grins, nudges

and half audible remarks one of the trio informed me that he knew of a nice steep hill, which he thought would prove satisfactory.

On arriving at the hill (which certainly deserved its recommendation for steepness), I attached my skis with a little assistance, and stood erect on the brow of the slope. The prospect was not inviting, but with my usual fixity of purpose I decided to start the descent, or perhaps it would be more accurate to say that I started the descent before making the decision. Before I could realize the joyous fact that I was really ski-ing, my feet showed a decided tendency to proceed with a rapidity which was quite unattainable by the rest of my body, and after a little reflection I decided to let them follow this course. Soon after this I assumed a recumbent position, from which I arose to see my faithless skis pursuing their course far down the hill. Clearly I

must capture them, and with this end in view I set out at a very deliberate walk.

The snow did its best for me, I admit that. It struggled nobly to support me, but just as I would prepare to trip lightly over the surface, it would break, leaving me in the depths of despair—and the snow-drift.

During this item of the evening's programme, the gentleman who had introduced me to the "nice steep hill" was joining his companions in advising me cheerfully to keep up my courage, take plenty of time, etc. Despite this encouragement, my ardour for ski-ing waned rapidly, and by the time I had arrived at my starting point I had resolved to go home and consider the matter from a scientific stand-point, and give the world the benefit of the knowledge thus acquired, and last, but far from least, never to attempt ski-ing again.

A. D.

Farewell, Macdonald.

When first a Freshman I espied
Macdonald's portals opened wide,
I entered with contented mind,
Wise in the wisdom of my kind.

Alas ! I woke one night with fear,
As sinister sounds smote on my ear.
The Sophs came swiftly to my room
And warned me of impending doom.

They roused me roughly from my bed
And bade me follow where they led.
Then through the darkened hall we crept
Past where the Senior Students slept.

At last we came unto the gym,
Said one : " It's up to you to swim."
They seized me, then I heard them laugh,
As swift they threw me in the bath.

How cold the water and how wet.
I said : " Enough ! " They said : " Not yet."
They dragged me out, then beat me sore,
With towels they chased me round the floor.

How vividly it comes to me
The way those Sophs ill-treated me.
" Oh! cruel brutes, pray cease," I cried,
As they grotesquely marked my hide.

A Sophomore I soon became,
I wondered where they got that name.
Methought : " No more hard seats for mine,
Upon a sofa I'll recline."

The name still rankled in my head.
A student fair unto me said :
" Pray, why that name, dear Mr. Earl ? "
Said I : " More sofa and more girl."

A Prof by chance heard my retort
And said, " Look here, you would-be sport,
The name's not Soph, the o is soft."
And I, embarrassed, simply coughed.

As Junior I was somewhat staid,
And never with the Freshmen played.
My great ambition was to call
On some fair student at the Hall.

A lovely " Teacher " won my heart,
But, goodness, I got such a start,
When first on her I called, to see
A lemon someone handed me.

Of course the lemon was all right
(I made some lemonade that night).
'Twas given, too, with goodly grace.
And then the door slammed in my face.

The question that most bothers me
Is this, " who gave it; was it she ? "
And if on me she had been sore
Why couldn't she have given more !

As Senior I again returned,
All petty things I lightly spurned.
Ambition fired my heart with zeal
And midnight oil I oft would steal.

Then came the finals and I passed,
Tho' by my fellows all outclassed.
And oh, the bliss as on my head
The cap was placed, the words were said

And now a B. S. A. am I;
Yet often for those days I'll sigh,
Those days that never will return,
And College chums for whom I'll yearn.

Adieu, Macdonald ! Fare thee well !
A sacred spot for thee will dwell
Within my heart where'er I roam,
My Alma Mater—erstwhile Home.

A. R. DOUGLAS.



ALMA MATER.

A College Romance.



THE time was early June, the place a New England college campus. It was the day before commencement and half a dozen students were luxuriously stretched out on a grassy bank near the library enjoying the comforts of pipe and cigarette. They were talking over the questions set by hard-hearted professors in the recent exams; but while thus engaged, footsteps were heard coming up the library path, which at that place was flanked by a clump of lilacs. Fearing it might be Prexie, the terror of all student smokers, pipes and cigarettes disappeared and the fellows lay quiet, hoping he would pass without seeing them. Thus they remained for a minute, then heard the steps pause at the bend of the path and a man's voice say: "At seven, dear, don't forget."

"It's only Johnston and his girl," murmured one, puffing at his half extinguished pipe. The others grunted assent and likewise resumed their interrupted smoke. All puffed quietly for a minute or two, and then Carvel, leader in all kinds of fun, sat up suddenly with: "Say, fellows, let's roast Johnston before we leave. He's got a date on for to-night. Let's help him to enjoy it." The others listened as he explained his scheme, and after a number of improvements had been suggested and discussed, a plan of action was agreed upon.

In the meantime what of the victim and the girl in the case?

Ralph Johnston, junior forestry student, was a big and handsome fellow, a good athlete, a good student and one of the social leaders in the College. Helen Connor, Junior Arts, and the

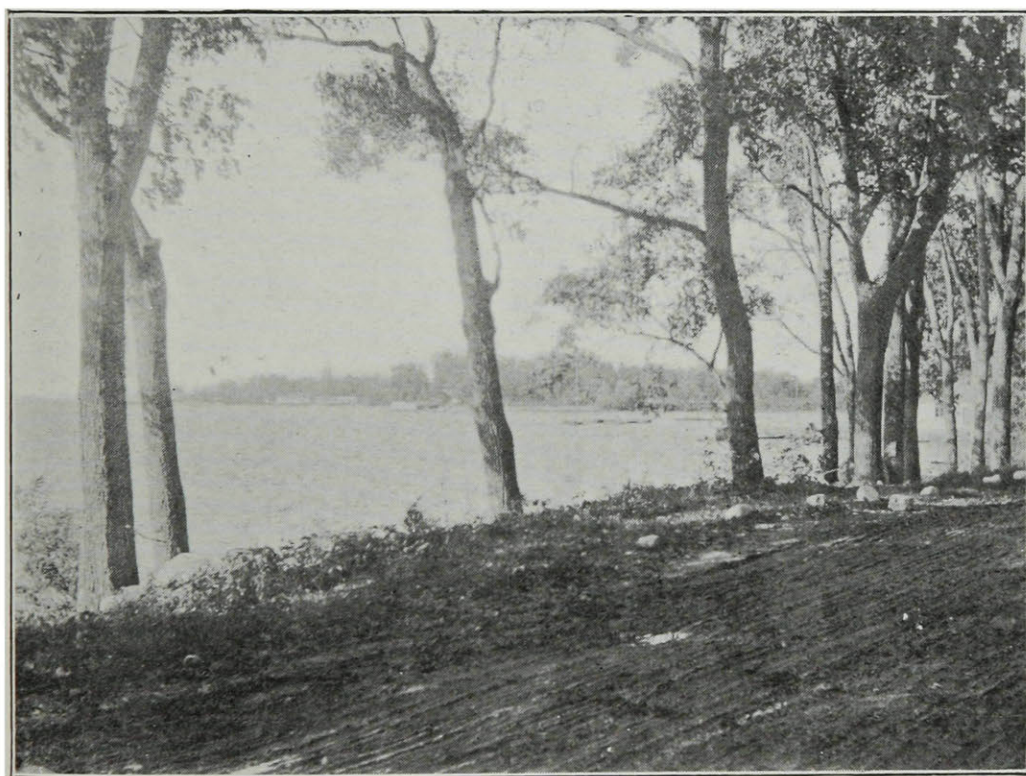
"dear" mentioned before, was all that you, reader, would wish that term to represent. Clever, tactful, unselfish, she was a fine example of that type of girl whom some authorities have said "never grows old." From her first days in College she had taken a prominent part in all phases of college life, and was one of the most popular girls in her own and other classes. In other classes, I say, because her dark eyes and ready smile had made her acquaintance coveted by Science, Law, Medicine and even Aggie students. To all, with one exception, she had been uniformly pleasant and courteous, the exception was Ralph Johnston. Before the close of his freshman year he had won from her lips the acknowledgment that she cared "a little, perhaps." This romance had ripened through two more years of college life, the said life including for them a goodly share of friendly teasing. Carvel and his friends had never let pass an opportunity for a joke at their expense. All, however, had been laughingly received and a few, by Miss Connor's quick wit, had been turned on the jokers themselves. At the time our story opens we may safely conclude that she cared more than "a little" and that the "perhaps" had disappeared. As they crossed the campus to the library they had been speaking of a paddle on the river for that evening, and it was to this that the "At seven, dear, don't forget," heard by Carvel and his friends, referred.

It was late in the afternoon when Ralph received a note from Carvel asking him down to Sigma Chi to discuss some athletic matters, and it was after five o'clock when he reached the "frat" house, to find Carvel and about twenty

fellows there seated at a table. Two of them at once stepped up beside him, while Carvel informed him that he was under arrest and would have to submit to a trial before a jury of his fellows, on the charge of being a confirmed "fusser," and of neglecting his duties to his class. Summers was appointed counsel for the prosecution, Brown for the defence and the trial began at once. At first Ralph was somewhat indignant at the trick played him, but his good nature soon returned and he

now some extreme punishment should be given as a last hope for reform.

Counsel for the defence then arose and pleaded for his client on the grounds that he was naturally a soft-headed fellow, and that during the past two years he had been so overcome by his infatuation for a pretty face that he had been unable to realize the enormity of his offence and the true kindness in all the friendly advice given by his classmates. Therefore, as the provocation had been very great, so great in-



THE OTTAWA.

resolved to see the fun through with a smiling face. Summers' witnesses all gave evidence to the effect that Johnston had been guilty of some of the worst crimes in a student's code of honour; neglecting class meetings to have tea at Mrs. F.'s (where Miss Connor boarded), going paddling on a baseball afternoon, giving away his class pin and, worst of all, attending chapel every Sunday evening with a girl. All the friendly warnings and advice of his classmates had been unheeded, and

deed, if rumour could be depended upon, as to almost upset some of the level heads in the court room, his client, whose guilt he could not deny, should be let off with a warning. Ralph smiled at the ingeniousness of the defence and at the verdict of guilty brought in by the jury, but it was with a feeling of dismay that he heard the judge's sentence. That he, Ralph Johnston, was to be given opportunity for reflection on the enormity of his sins, in the hope that he would repent, give up his evil

ways and join his classmates again with a repentant soul and thankful heart. They, the judges assured him, would under these conditions forget all his past indiscretions and receive him again as a friend and brother. "In order," the judges continued, "that you may have an opportunity for calm and undisturbed reflection on this important subject, I hereby command that you be now taken to the third boom pier from the landing place, fastened securely on the top thereof and permitted to pass the night in silent communion with the stars. Officers, execute the sentence."

While these events were happening in Sigma Chi Miss Connor was returning from a call on a friend in the village. Passing along the road above the frat house she saw a number of students escorting another to the landing place in a manner that indicated he was a prisoner. There was something about the tall figure of the latter that made her think it was her lover; and curious to learn whether this was so, she hurried the short distance to Mrs. Fenwick's, borrowed that lady's field glass without leave, and ran to the upper window facing the river. With the aid of the glass she saw that the tall man, now in the boat with his captors, was indeed Ralph. She saw him pushed up the side of the pier, a short scuffle on the top, and a few minutes later the boat rowing back to the landing without him. She was a quick-witted girl and had quickly realized that a practical joke was being played on Ralph and probably on her account. Therefore she decided to take part in it also and to turn the tables if possible.

It was already dusk, but she waited patiently until it was really dark, and then hurried to the landing place. She

knew where Ralph kept his canoe and paddles, and soon had the light craft in the water. Paddling out to the third pier she let the canoe drift in with the current on to the upper side and then softly called out: "Ralph."

"Helen, you here," came the astonished reply from the pier.

"What are you doing up there?" she asked.

"Looking at the stars," he replied. "It's another joke of Carvel's on us, girly. He found out that we were going somewhere to-night and tied me out here to prevent it."

"Perhaps I'll have something to say about that. How are you fastened?"

"Tied to the centre log with ropes and with a big stone for a head rest," he replied.

"Look out! I'm coming up," she called, as she fastened the canoe to the end of a projecting log. It did not take her long to scale the pier, unfasten the ropes and set the prisoner free.

Our story drops a few minutes here. As Ralph was always a generous fellow we may suppose he paid for his release; how, is left to the reader's imagination. If you were the man, how would you pay? If you were the girl, how would you wish to be paid?

People sometimes get out of canoes more quickly than they got in, but no such misfortune attended Ralph and Helen. The next we see of them, their canoe is slowly drifting down river with the current while they laugh softly over the joke and what Carvel will think when he learns how it failed. It was moonlight by this time, a clear, perfect June evening. Moonlight, the wise people say, sometimes plays tricks with folks' "grey matter." Perhaps that was the reason Ralph's usually level head got a little bit turned.

"Look here," he said, "why can't we turn this on Carvel and his crowd a little more. Are you game?"

"How?" she asked, and then he eagerly explained.

"Your uncle in the village is a minister. Why can't we paddle down there and be married to-night and then send these fellows at the frat an announcement to-morrow morning? I have had more than enough forestry to suit me already. Old Trigg with his histology and Hardy with his chemistry have killed all the liking I ever had for it, and I'm sure you have had enough of those musty old classics. Let's pitch the whole blessed lot and try house-keeping."

At first she would not hear of the plan, but after some persuasion she consented to paddle down and ask the advice of Uncle Jim and Aunt Lizzie.

It was nine o'clock when they reached Uncle Jim's. At first, the good man would not hear of a marriage, but after Ralph had pleaded earnestly with him for a short time he softened a little, and then when Aunt Lizzie, who was young and romantic, told him "he must," why, he decided that it might be done. Anyway, there were no real objections. Helen's parents were dead, Ralph had a farm; they had been engaged two years. "Yes, they could get married and he would marry them."

What need to say anything about the next half hour? How Ralph pulled his friend Wilson (who sold marriage

licenses) away from a neighbour's party, or how Aunt Lizzie worked to make Helen look beautiful, how the minister's own frock coat fitted Ralph, etc.

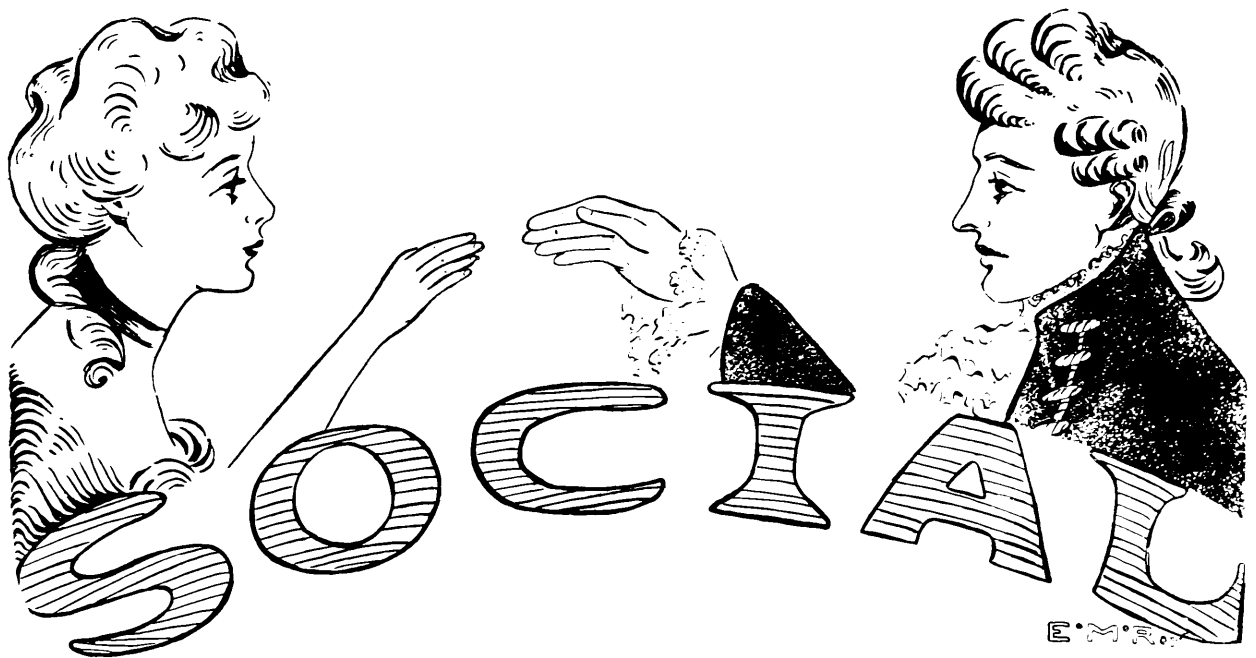
These are only little things, and the reader's imagination will supply them. The all-important result of the decision to ask the advice of Uncle Jim and Aunt Lizzie was that Miss Helen Connor became Mrs. Ralph Johnston at precisely twelve minutes to ten.

There is little more to add. At Sigma Chi next morning Carvel and the others were eating breakfast and wondering how Johnston could have got loose. Two of the fellows had gone out at day-break with an invitation to breakfast, but found only the ropes on the pier. While they were talking the matter over at table, a boy came to the door with a morning paper for Carvel. Glancing over it he found a marked paragraph, and read it. "Well, I'm blowed!" he exclaimed. "Fellows, listen to this:

'A very pretty wedding took place last evening at the home of the Rev. James Heustis, when Miss Helen Connor, of Northcliff, was united in marriage to Mr. Ralph Johnston of Lincoln. Both were popular in college circles and will receive many congratulations from their friends. The happy couple left on the 10.30 train for Bar Harbor where they will spend a few weeks.'"

There was a moment's silence and then the quiet little fellow at the corner murmured: "Did anybody say 'Lemons?'"

R. P. G.



CHRISTMAS VACATION AT THE COLLEGE

Who wants to have a good time during next Christmas vacation? Please apply for particulars to the members of the Good Time Club who spent last Xmas vacation at the College; these, we are sure, will gladly give information to all those desiring it free of charge. It is advisable to see them early and avoid the rush.

Many are the tales that are told by the lips of five girls and twenty boys whose good fortune it was to spend the vacation here. From the standpoint of number, it would appear as if Cupid had been very heavily taxed, but it is only fair to say that numbers were evened up by some of our good-natured village friends.

Let us begin by mentioning some of our daily duties. Perhaps the most difficult and distasteful task for the day was that of getting up for breakfast, which even under ordinary conditions is a hard one, and those of us who did manage to reach the dining-room always wore the expression of regret at having attempted the undertaking. Our next most difficult task

was that of getting to bed at night; the days seemed to be very short and the evenings even shorter. These two burdens we think will suffice for the present article, and we shall now pass on to some of our pleasures.

As you might imagine, no fixed programme was arranged each day, but hour after hour we planned and carried into effect such amusements as were considered absolutely necessary for existence.

Skating and snow-shoe tramps were the order of the day; occasionally this pleasant monotony would be broken by a sleigh ride, while some of our card fiends sometimes found it fine fun to remain in the Girls' Building after dinner at noon. In the evenings, little receptions were held in the Girls' Building and sometimes in the Men's. These were usually spent in playing games and dancing. Besides these, Mrs. Harrison and Mrs. Lochhead each gave a reception to which all the students and their friends were invited. At both of these, new tasks were imposed on the men. Imagine having to dress dolls and trim hats! Prizes were given for the best in each case.

and we were pleasingly surprised to see the taste and skill exhibited by some of our male friends who would have us believe that they have never heard of the Ladies' Home Journal. The judges expressed the opinion that the boys' work compared most favourably with the girls', and was, if anything, somewhat better.

The night after Xmas, however, was perhaps the night of the whole vacation and was one of experiences for some of us. Little scenes in which mistletoe figured quite prominently were many and varied, some resulting in

little hayseed felt can better be imagined than described!

First we were shown to our rooms, and now we can afford to laugh at the flood of tears we shed, for tears are things of the past. How nice some of the old girls were, only those who were very lonely can understand.

now we love our College and all the girls, to say nothing of the "Aggies", and have the best times in the world.

Several nights in the week we are invited to a "feed" and these invitations are invariably accepted. At a "feed" we are given a saucer among



A SNOWSHOE PARTY AT CHRISTMAS.

the last act (?) while some few were hardly completed.

No tragedies were committed during the whole time, we are glad to say, and we all regret that the holidays were over so soon. Too much cannot be said of Mrs. Muldrew who spared no pains in making us all happy and comfortable, and in making the time pass so very pleasantly.

LIFE IN THE GIRLS' RESIDENCE

How big and lonesome and indifferent it seemed, that first day at Macdonald College!—knowing no one and being known of none. How a sensitive, shy,

three people, a spoon among six, and a glass for the whole bunch. After luncheon, when all wax eloquent over their cold water(?) we have the speeches. On returning to our rooms we find our lights are out, and, upon crawling into bed, discover that some kind friend has spilt a cup of sugar in it or perhaps the sheets are pinned together. Indeed some have learned that icicles and snowballs are not the most pleasant bed-fellows,—but this is a minor detail and one must not make a noise, for that dear "cop" is ever near!

What peril we are in when we take a notion to wander around in study

hour, looking for someone who has something to eat; for girls, in spite of traditions, do eat sometimes, and should there happen to be a "feed" in study hour and a rap comes at the door, how quickly girls, dishes and food disappear under the bed, tables, and into the closets! When the President of the Court of Honor is admitted, the girls are studying, and there is no sign of anyone else in the room except two or three pairs of pink-slippered feet sticking out from under the bed. A sigh may come from under the table where someone's back is being broken or a suppressed giggle from the closets. Girls are like ostriches in that they imagine they are safe if their heads are hidden; and is it any wonder their feathers are somewhat ruffled when on being hauled out they find that their elbows have been snugly resting in the pie, that someone has been holding the bottle of jam carefully upside down, and, last but not least, they will all be fined fifty cents at the next meeting of the Court.

Every two weeks the tables in the Dining Room are changed, which means that we are on our good behaviour for the first few meals at least. Those table conversations. Some of them should be written in a book! But they are a part of our good times, and doleful are the lamentations when we find ourselves slated for the Old Maids' tables.

On Saturday evening the callers come over to our Residence, and how we watch and wait for the maid who never comes to tell us that we are "wanted" in the reception room, but passes on to our more fortunate friend or room-mate. Sometimes we derive much pleasure from a casual observance of the fortunate ones, and perhaps our time may come some day—who knows!

Only five months more at Macdonald College! How can we crowd all the social calls, sisterly pranks and midnight parades into that short time! But when we do go home we will all feel the better for having lived together and known each other and our popular House Mother.

L. W.

THE GIRLS' RECEPTION.

The second reception in the Girls' Residence, given on December 17th, was a fitting farewell to the Short Course girls. The Gymnasium decorations surpassed all previous efforts and reflected great credit on the Managing Committee. The streaming lines of College colours and banners, the home-like clumps of chairs around a central floral decoration, and the comfortable cushions and cosy corners were enjoyed to the full by an audience of some three hundred people.

Notwithstanding previous receptions, changing of tables in the Dining Room and Post Office *tete-a-tetes*, introductions were still in order. But opportunities for conversation were limited, and many breaks were occasioned by a programme which would have done credit to a high-class concert.

The Girls' Quartette appeared in usual good form and merited a hearty encore. Violin solos by Miss Ross, of Montreal, a violin duet by Misses Reichling and Schafheitlin and a piano solo by Miss Farmer, were special features on the programme; but the climax came in the spectacular dance given by a bunch of "Aggies," half of whom were dressed as girls for the occasion. The hilarity of the boys and the still more boisterous conduct of the "girls" brought forth paroxysms of laughter, and the tender endearments of both put the audience in a

proper mood for popping the ———corn which served as refreshments for the evening.

Ten o'clock was the signal for joining of hands in "Auld Lang Syne," but this, supplemented by "God Save the King," was of no avail in breaking up all remnants of the merry party. The snapping of lights and frequent good nights were found to be necessary, and in the parting many wishes were expressed for more frequent receptions.

tions. But as the wind soon found its way into the "forest of 'limbs'" we turned about and urged the driver to cover.

As we left the sheltering village and came into the wind-sweep of the College river front a spell of silence came over the happy party. 'Twas a premonition! Right under the shadow of the Power House chimney a runner left the track, and the "better chances yet" came as twenty people were



UNDER THE PORTICO.

A SLEIGH DRIVE.

'Twas a memorable drive—that given by the Men's Residence Committee to the Girls' Court of Honor, and included the matrons of both Residences as chaperons. It began, as such drives usually do—a fine pair of horses, a comfortable sleigh "wit' lot of hay keep our foot warm and plenty buffalo," and people seated on both sides or jammed down amidst a forest of "limbs."

Up through the village and along to Senneville we glided to the tune of "Jingle Bells," with the wind sighing through the tree-tops and the snow crunching under the runners for varia-

thrown in a twisted, tangled, horrible heap—Logan across a Ford, Matthews sitting on a Pye, and Grisdale all Tucker (ed) out. But enough of details. Suffice to state that by such Herculean efforts as Davis displayed in extricating a whole Hurd—from the ruins, all were soon back into the sleigh and from it to the blazing fire-places of the men's Reception Rooms.

Those refreshments—which are made possible by the men's matron being a Household Science graduate—words fail to describe them! Soon none were left to describe! And those fireside stories, including everything from Hades to

Heaven—who can forget them, not even the one of “Baker and the bracelet!”

But all good things—even the walk through the tunnel—have an end! In this case it came as we lined up in the Girls’ Building, gave our parting bow and retreated to “Good-night, ladies, we’re going to leave you now!”

THE COLLEGE LITERARY SOCIETY.

The third meeting, and the last for the Fall Term, was a departure from the regular programme of the Society. Dr. Lynde has never yet disappointed a College audience, and his lecture on “Sound and the Phonograph” was throughout most interesting and instructive.

A solo by Miss Rollins, rendered in excellent manner, was a fitting introduction to the lecture of the evening. It furnished Dr. Lynde with an example of music, as opposed to noise, which he at once illustrated. By means of apparatus, set up for the occasion, he demonstrated the principles of sound. Then turning to the phonograph he recorded a cornet solo by Mr. Savoie, a recitation by Mr. Kennedy, and college songs by “picked male voices.” The reproduction of these items brought forth peal after peal of laughter. The medley of noises and music, mingled with “those voices from the gallery,” was a fitting close to a very pleasant evening.

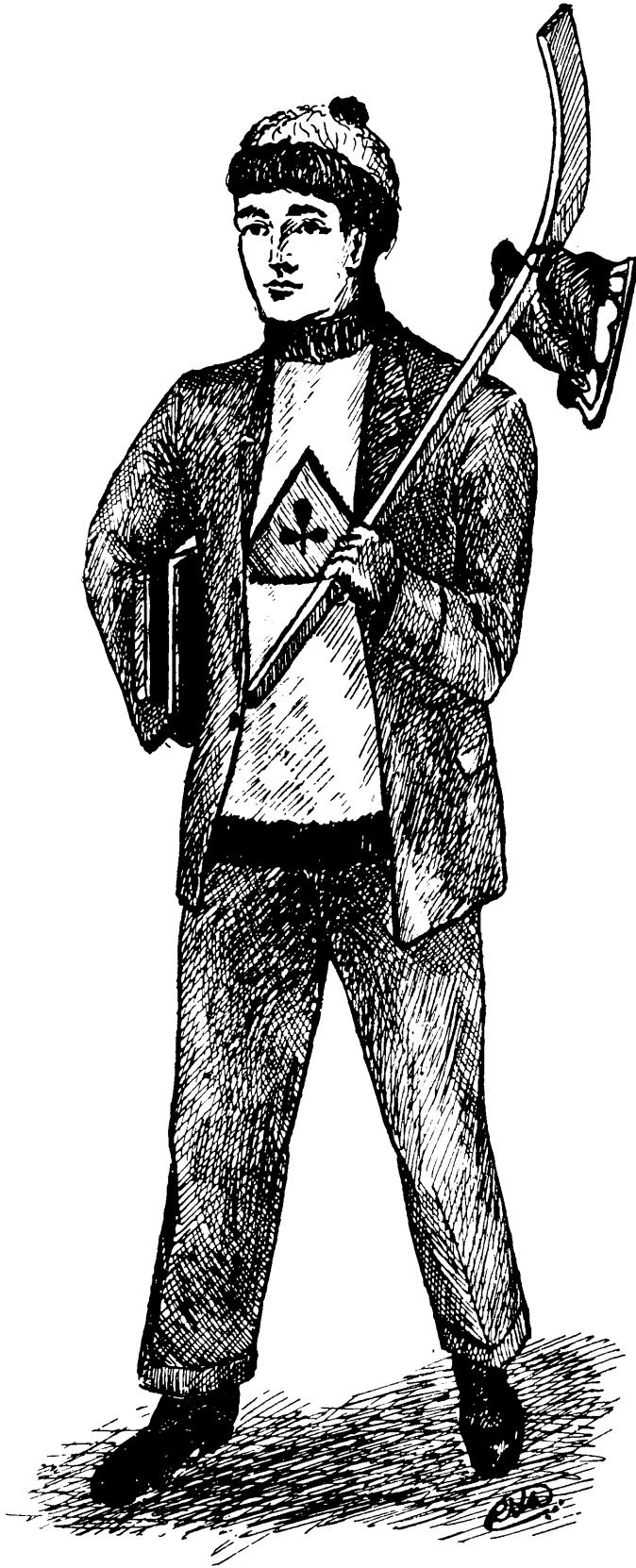
At the first meeting for the Winter Term, Mr. Lods and Miss J. A. Fraser debated the affirmative and Mr. M. B. Davis and Miss Sherman the negative on the subject:—Resolved, that after leaving High School it is better for a girl to take the Household Science Course than the B.A. Course.

Mr. Lods did not show up in his best form, perhaps owing to the fact that he

was not spurred on by the Class spirit of the Inter-Year competitions, but in rather an able speech he endeavored to show that the Arts Course as previously adopted for women is now out of date. Education for the Twentieth Century must include the various sciences relating to the home, and these studies, besides being of practical value, take higher rank as cultured subjects than do Latin, Greek, and the higher mathematics. An Arts graduate, if she is to be more than a mere ornament to society, has only the field of teaching open to her, while the Household Science graduate besides being a teacher may become a dietitian, a settlement worker, a house-keeper, or a home-maker.

Miss Fraser gave an excellent paper on the relative value of the courses for the future home-maker, which class includes ninety percent of our American women. She showed how knowledge of Household Science would raise the home life throughout the length and breadth of our country and make for improvement in health, happiness and prosperity. If spoken as ably as it was read Miss Fraser’s paper would have been the speech of the evening.

Mr. Davis maintained that the B.A. course, including such subjects as logic, philosophy, ethics, economics and languages, trains the mind rather than gives instruction in mere details and thus enables a girl to cope with any situation. It develops a thoughtful type of woman who, rather than cater to the mere gastronomic tastes of humanity, will be a tremendous factor in the advancement of civilization. In the home she may be the equal, and consequently the companion, of man. Household Science graduates may be hired to perform the menial duties.



MACDONALD TYPES;

No. 3, THE "AGGIE."

Miss Sherman took up the case of the women who, owing to unequal division of the sexes, must perforce remain single. The B.A. course develops in them self-confidence, makes them resourceful and so broadens their interests that they never grow old! It fits them for any sphere—principals of schools, missionaries—and makes them, in short, the equals of men.

While the judges—Mrs. Muldrew, Mrs. Lynde and Mrs. Klinck—were deciding in favour of the affirmative, Miss Rittenhouse delighted the audience with a piano solo, and Mr. Flewelling amused them with a comic song. Mr. Swaine performed the duties of critic in his usual able manner.

THE MACDONALD ORCHESTRA.

This College year has shown another advance by the decision of a number of our enthusiastic musicians, notable among whom was Mr. Weir, to start a College orchestra, which should utilize and discover all the available talent we have.

In the latter part of last November a meeting of all those interested in music was called, and at it Mr. Weir was elected leader. The members of the orchestra were not from the student body alone but included members of the Staff, and in fact was open to any one connected with the College. The orchestra now includes Miss Coristine, piano; Misses Reichling, Fraser, and Messrs. Weir, Newton and Baker, violins; Mr. Savoie, cornet; Mr. McConnel, trombone, and Dr. Macfarlane the 'cello.

The orchestra meets every Monday evening, and considering the short time it has been organized, it has done some really excellent work. On several occasions it has assisted at different College functions, notable among which were

the entertainments given by the King's Daughters at the Clarendon Hotel.

The success gained and the enthusiasm shown by this little band of music lovers has been largely due to Mr. Weir, who has proved himself a most efficient and popular leader. H. C. F.

WORK OF THE MEN'S LITERARY SOCIETIES.

The Class '11 Society has the honor of being the first at the College, and by the hearty co-operation of its members it has endeavoured to maintain first position against all-comers. As to the work for the past term, President W. H. Brittain reports that pressure of work in their final year renders it impossible for the members to devote as much time as heretofore to the society. The programmes include impromptu speeches, discussions on topics of interest and addresses from members of the Faculty.

This pressure of work led the Society to withdraw from the Inter-Year contest, but they generously donated a cup to encourage the competition amongst the three remaining societies. These Inter-Class debates had in previous years brought out some excellent debaters, but as men who had stood the strain of upholding class reputation were loath to enter the contest again this year, a Public Speaking Contest was decided upon.

Under the able management of President J. G. Robertson, the Class '12 Society has completed a very successful term's work. Ninety per cent of its members were present at the meetings and profited by debating Free Trade and Trade Unionism. Addresses by members and literary and musical selections were prominent features on the

programmes. The Class feels that the two senior years might do well to combine their societies, as they would thus have the enthusiasm of numbers which is really necessary for most successful work.

President G. C. Halliday gives a glowing account of the Class '13 Society. Programmes have varied from humorous readings to the deep and logical reasoning of debates. The members are rendering hearty support and as a result are deriving much benefit. They are grateful for helpful addresses from members of the Faculty.

H. J. M. Fiske has the honour of presiding over the meetings of Class '14 Society. It has debated the desirability of co-education, the benefits of friends vs. money, and Canada's maintaining a navy. The literary and musical evenings have been very successful, and this society gives promise of some excellent material.

WORK OF THE TEACHERS' SOCIETIES.

The excellent beginning reported in the last number of the MAGAZINE was continued throughout the term; but after the experience of some few meetings, BI and BII joined forces and elected Miss Rollins president. The society aims to cultivate literary taste, to promote effective public speaking, and to train in a knowledge of parliamentary procedure.

The excellent work of Model A has been reported, and the work of the Elementary Class is also of a very high order. Strength came from the union of its two divisions, and the experience

gained is shown forth in an ambitious programme for this term.

As yet no Literary Society has been organized in the School for Household Science. What better training than public speaking for a girl who should become a social leader in her community and a factor in the work of women's institutes. The work of the literary societies might well come under the supervision of the Department in English and be made a very valuable adjunct to the course. What's the matter with Science!

THE MODEL "A" EVENING.

We have to thank the Model A Literary Society for a most enjoyable programme of "College Girls' Sketches" and piano duets which were given before a large gathering of faculty and students on January 26th.

The platform of the Assembly Hall was converted into a veritable college girl's room with its rival pennants and cosy corners, not to mention the forbidden chafing-dish—for once in plain sight! The scenes enacted—Opening Day, A Feast à la Light of the Candle, and an Afternoon Tea—gave a pleasing insight into the various phases of school life outside of lectures.

Miss Brittain as "Patty," with her several classmates, deserves great credit both for the dramatizing of the play and its clever rendering. A few Loganisms and Grindley witticisms, with a judicious selection of Kennedy aphorisms, highly instructive as well as hugely amusing, brought the evening to a close amidst the hearty applause of the audience.

E. L. R.

Some College Presidents.

Our ever smiling friend Baird, alias "Bunty", commenced his early career upon this planet by being born at an early age in Leicester County, Nova Scotia.

Coming to Macdonald as an "Aggie", his trustworthy appearance caused him to be elected treasurer of the M. C. A. A.

In his Sophomore year, Whylie filled the position of chairman of the Rink Committee with great satisfaction. This year our fellows have once more placed their confidence in him by re-appointing him.

Although the duties of the Rink Manager are so strenuous, Whylie showed his generosity and college spirit by accepting the appointment.

The whole student body owes Whylie Baird a deep debt of gratitude for the way he has worked to give us the splendid rink we now have.

* * * *

Miss Lena Alguire, the popular President of the Macdonald Girls' Athletic Association claims Cornwall as her place of birth.

In 1909 Miss Alguire's keen interest in athletics and prowess at them gained her a place on the girls' first basket ball team, of which this year she is captain. This, however, was not the greatest honour accorded her, for she was elected at the beginning of the present college year to the presidency of the M. G. A. A., an honour of which she has proven herself worthy in every way.

* * * *

Born in Bonnie Scotland, some time since the Revolution, William Logan passed his early years and received his education in the town of Kircudbright.

Seeking for greater worlds to conquer, "Bill" left the protection of his motherland and sailed for Canada. He entered Macdonald College as one of its first agricultural students, where his canny disposition and good looks won for him the presidency of the Class '11.

In his Sophomore year Logan was President of the Tartan Literary and Debating Society, also chairman of the first Residence Committee that governed the men's building. So successful was he, that this year he has again been appointed to that position, and fills it to the satisfaction of the most exacting.

* * * *

The popular president of the Macdonald College Athletic Association hails from the town of Howick, Quebec. There he spent his early days developing his physical powers on the farm and his mental powers at Ormstown Academy.

Coming to Macdonald as a member of Class '12, Campbell's athletic prowess soon obtained a place for him on both the College Basket Ball team and his Year Base Ball team, the latter of which he was Captain. In his Sophomore year, he again played on both these teams and was elected Vice-President of the Athletic Association; and this year, Archie was elected to the presidency of the Athletic Association.

* * * *

Miss Pipes, the last term's Court of Honour President, who has given such general satisfaction, gained her undoubted "power to command" by her training on the farm where she was brought up. That, together with the Amherst Academy, have been most successful in producing such a popular and efficient President.

* * * *

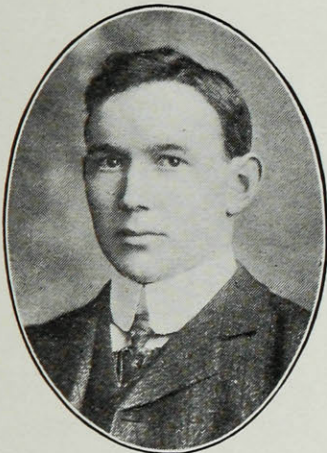
Miss Pye, who holds that onerous but honourable position this term, is ranked among the natives of the Eastern Townships. She was educated at the Ulverton Model School, the St. Francis College High School, and has now almost finished the Teachers course at Macdonald. No one who knows Miss Pye will doubt her fitness for the position to which she has been appointed.



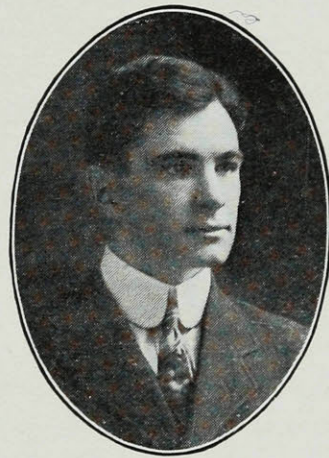
W. BAIRD.



MISS L. ALGUIRE.



W. LOGAN.



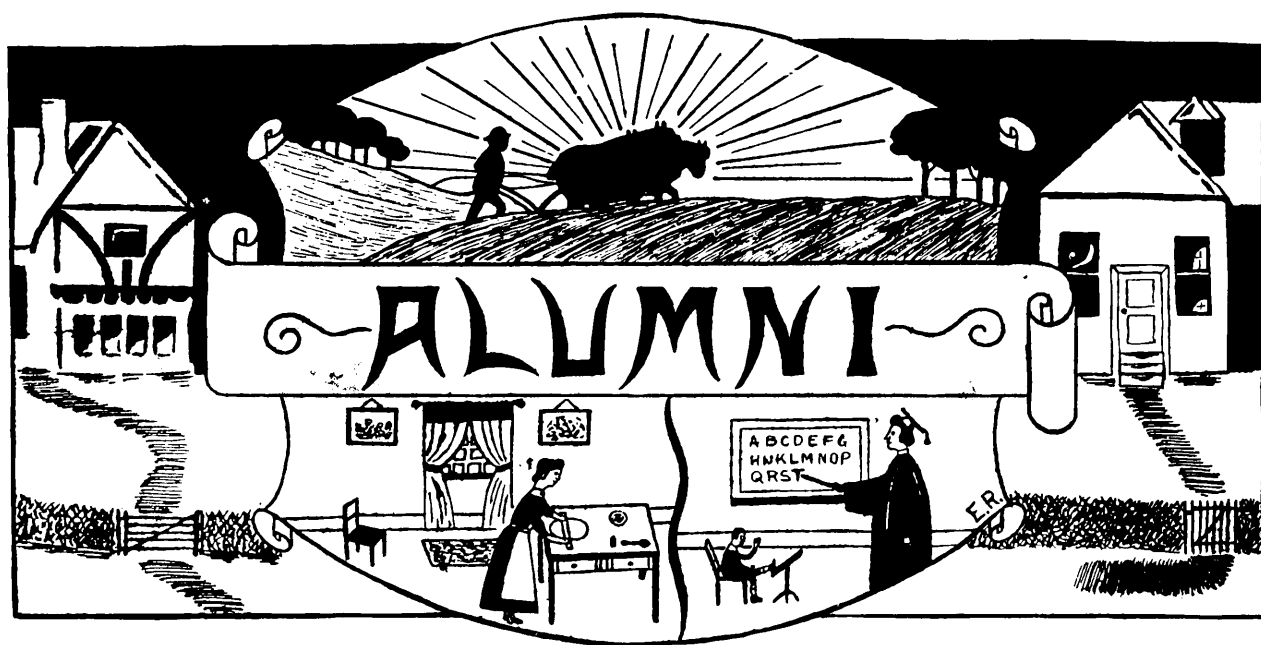
A. A. CAMPBELL.



MISS PIPES



MISS G. PYE.



TEACHERS.

Miss Dorothy Mowat is living at her home in Montreal and is still an enthusiastic basket ball player. Miss Mowat plays for the W. A. A. Team, of which Miss Margaret Scott, Model '09, is Captain.

Miss Mabel Cromwell is raising the plane of thought of the rising generation in her home in Sawyerville, Que.

Miss Mildred Russell is teaching in the Alexandra School, Montreal.

Miss Pearl Scott, a graduate of the Elementary Class of 1910, and of the Short Course Science of the autumn 1910, is taking the Elementary Department of Scotstown Model School for a short time, the teacher having had to leave. We remember Miss Scott by her scientific base ball playing.

Miss Sargeant has charge of all the Model Grades in Lacolle Model School, Lacolle, Que.

Miss B. Robb is teaching her second year in Lascelles, Que.

Miss Evelyn Lafleur, '08, is teaching in the Riverside School, Montreal.

Miss Ruby Ascah, Elementary '10, is teaching in Haldimand, Gaspé.

Miss Ella Mabe is teaching in Sandy Beach, Gaspé.

Miss B. Bechervaise is teaching in Sawyerville, Que.

Miss Winnifred Caldwell, Model '10, is teaching Gaspe Model School, Gaspé, Que.

Miss Amy B. Smith is teaching in the L'Anse Aux Cousin School, Gaspé, Que.

The engagement is announced of Miss Alta R. Goldblatt, Model '08, also the first President of the Court of Honor, to Mr. Samuel Kahn.

Miss E. MacBurney, Miss H. Bruneau, Miss M. MacGibbon, and Miss J. Wood are those of Model '09 who are teaching in the Aberdeen School, Montreal.

Miss Isabel McCaw, Model '09, is taking a course at the R. V. C. this year, and is as much a Basket Ball enthusiast now as she was while at Macdonald.

Miss Myra Bradford, Model '09, is taking a Kindergarten course at the Normal School, Ottawa, Ont.

Miss Inez McLachlan, Model '08, is taking a partial course at the R. V. C. this winter.

The engagement is announced of Miss S. Herminie Bruneau, of Model '08, to Mr. Robert Massey Scrivener of Sydney, Australia. Mr. Scrivener is president of McGill '11 and of the McGill Electrical Club.

Miss Edith Moore, Model '08, is resigning her principalship at East Angus, Que., and intends to teach in Montreal next year.

Miss Jasmine Gillman, Model '09, is principal of St. John's High School this year.

Miss Helen Taylor, Model '08, is president of the Freshman Year at the R. V. C.

Miss J. Collins and Miss P. Church, Model '10, are teaching in the Alexandra School, Montreal.

Miss Ethel Mosher is teaching in Bristol Corner, Quebec.

Miss Bella Young and Miss Alice McDougall are teaching in Point St. Charles.

Miss Hazel Moore is teaching in the Dufferin School, Montreal, Quebec.

Miss Carrie Todd, a graduate of Model '08, is now in training in Montreal General Hospital.

Miss Ruby Blois, Model '09, is teaching in the Earl Grey School, Montreal.

Miss Ethel Pope, who is now Mrs. F. J. McAndrew, is living in Wheatland, Manitoba. Her sister, Miss Myrtle Pope, a graduate of the same year, 1908, is staying with her.

Miss Edith Foster, Model '10, who was one of our star basket-ball players, is teaching this year in the Aberdeen School, Montreal.

Among the students teaching in the Fairmount School this year are, Jessie Aird, Betty Stevenson, Carrie McKay, and Helen Robertson, all graduates of 1910.

Miss Mildred Brown, '08, is teaching the Elementary Department in the Danville Academy. Her address is Danville, Que.

Miss Della C. Neill is teaching in the Royal Arthur School, Montreal.

Miss Emma Moffatt is teaching in the Victoria School, Quebec City. She was the only graduate of Model '10 whom Quebec city was fortunate in securing.

Miss Irene Hardisty, Model '09, is teaching at Fort Saskatchewan, Alta.

Miss Louisa French, Model '10, is assisting Miss E. Moore at East Angus, Que.

HOUSEHOLD SCIENCE.

The engagement is announced of Miss Marjorie F. Barrett, Class '11, to Mr. Chas. Heward, of the Royal Trust Company, Montreal.

Miss Mabel Cooper, of Science '09, was married early in the fall.

The engagement is announced of Miss Hope Smith, Science '11, to Mr. J. McDermot, of Montreal.

The engagement is announced of Miss Ada McNair, of Science '11, to Mr. John McCrae, of Cape Breton. The marriage is to take place early in the coming summer.

The engagement of Miss Doris Fenwick, of Science '09, to Mr. Geo. Bennet, of Montreal, is announced.

Miss Lillian Nichols is teaching in the Kindergarten of the Cote des Neiges School, Montreal.

Miss Gladys McLaren, of Science '11, is in training in the Boston City Hospital, Boston, Mass.

Miss Patience Scott, of Science '09, is spending the winter in England studying art.

Miss Gladys Brown, Science '11, spent the week end of Jan. 21st at the College, a guest of Miss Susie Hill.

Miss Edythe Nelson, Science '11, is spending the winter in Ottawa.

Among the old Science girls who have visited the college during the month of January are the following:—Miss Edith Gordon, Science '10; Miss Marian Webster, Science '10; Miss Alice Armitage, Science '10; Miss Elsie Seller, Science '11; Miss Jessie Wrighter, Science '11; Miss Marie Rutherford, Science '11; Miss Dora Brown, Science '11.

AGRICULTURE.

Harry Hayes, of Class '12, and his brother Jim, of Class '11, have taken up a large section of good wheat growing land near Lacombe, Alberta. They regard conditions very favourably, and

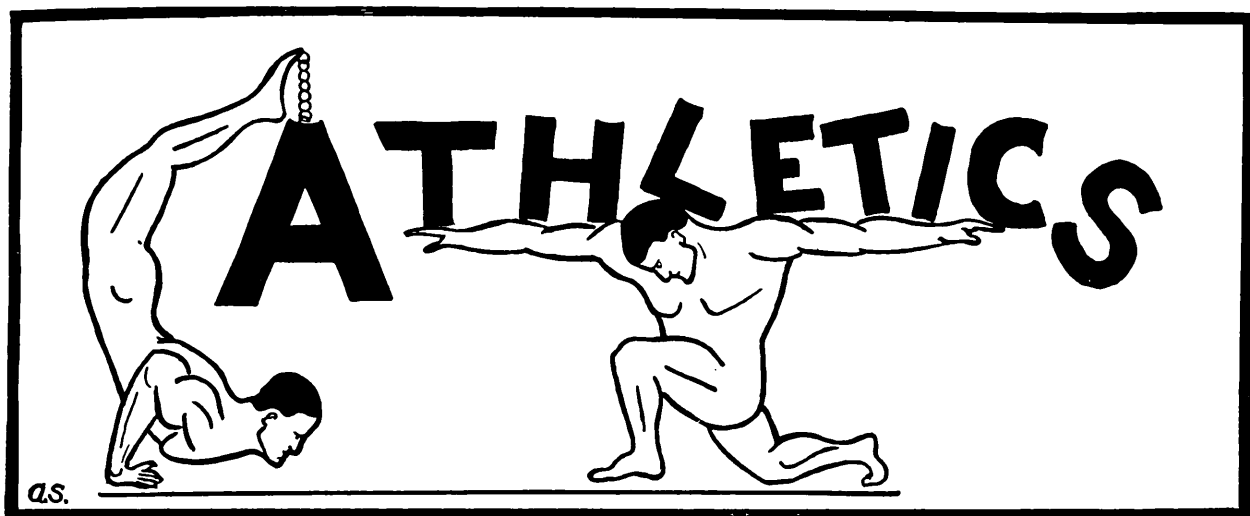
we feel confident that they will be able to report a good crop next fall.

Hastings Flewelling, of Class '12, is at present running a combined vegetable and dairy farm at Clifton, N.B., but is going to rent a large dairy farm in April, 1911. He hopes to return in the near future and finish his course at Macdonald.

Harry Lebeau, of Class '12, is employed in the office of the Massey-Harris Co., Ottawa, and although he is doing well, the love for Agriculture which he gained at Macdonald has grown so strong that he intends to go West in the spring to take up farming.

The enthusiastic Jack Williamson paid us a short visit this term and disappeared as mysteriously as he came. Jack's many friends were pleased to hear, once more, his gentle steps along the corridors.

N. J. Macdiarmid, who originally joined the College with Class '11, but who left last Christmas, is now in the employ of the Dominion Express Co. at Calgary, Alberta. Judging by the western newspapers Mac's name is one of the high class ones in Hockey circles, where he is making a reputation for himself. His classmates and friends wish him all success.



MACDONALD COLLEGE ATHLETIC ASSOCIATION.



THE Macdonald College Athletic Association held its annual meeting for the election of officers on Dec. 5th, the balloting resulting as follows:—

Hon. President, Dr. Harrison.

Hon. Vice-President, Mr. Barton.

Hon. Members, Dr. Todd, Dr. Sinclair, Dr. Walker, Messrs. Cutler, Bates, Vanderleck, Monroe, Weir, Powter and Doig.

President, A. Campbell, '12.

Vice-President, J. S. Dash, '13.

Secretary, W. Gibson, '13

Treasurer, A. Ness, '12.

Committee, Summerby and Spencer, '11; R. S. Kennedy and J. G. Robertson, '12; Heustis and Emberly, '13; R. F. Williams and Montgomery, '14.

In the retirement of Mr. Spencer the Association loses a most efficient and popular officer. The success of our third annual field day and the general prosperity and popularity of the Association are in no small measure due to the untiring energy and enthusiastic work of Mr. Spencer. The hearty thanks of the Association were tendered to Mr. Spencer by an enthusiastic vote from the rest of the members. Mr. Kennedy, who has acted as Secretary

for the past year, has also been a very popular and capable officer; in fact the whole of the Committee have done their work in such a thorough and successful manner as to win the gratitude of all connected with College Athletics.

The President-elect, Mr. Campbell, needs no introduction to College students. Popular in all College circles and himself an enthusiastic athlete, "Archie" should prove a strong power in guiding the destinies of the Association for the coming year, and in this we wish him all success.

BASKET BALL.

Macdonald is proud of her Basket Ball team. By hard work the team has improved much, and has made a very creditable showing in all matches played; the standard of the game being considerably higher than last year. Large crowds of students and friends have witnessed the games in the Men's Gymnasium, thus showing their interest and incidentally their College spirit by cheering the contestants on to victory.

Mr. Smiley, captain, and Mr. Gordon Ross, manager, and a keen bunch of players are responsible for the good showing the team has made. Nor must we forget the second team which

is playing good, snappy ball, and making some of the first team men work hard to keep their places.

The following is a list of the games played and their results:—

Macdonald College vs. All Stars (Montreal), won 20 to 1.

Macdonald College vs. McGill Science '11, lost 28 to 32.

Macdonald College vs. Westmount, won 22 to 13.

Macdonald College vs. McGill, Seniors, lost 14 to 32.

Macdonald College II vs. McGill Arts, '14, lost 19 to 35.

Macdonald College II vs. Diocesan College, won 34 to 10.

The final game which was to decide the championship was between the Ayrshires and the Galloways, and resulted in an easy win for the latter, ably captained as they were by Summerby. The Galloways had easily the best battery in the league, and it was to "Bob" Summerby's great skill in delivering the spit ball, which was always carefully handled at the receiving end by Heustis, that the Galloways owed a victory which was a comparatively easy one.

Messrs. Barton, Vanderleck and Cutler kindly acted as umpires during the entire series and most successfully, too.

The captain of this year's Association Baseball team is Carl Sweet '11. and the



A SNOW SHOE TRAMP.

INDOOR BASEBALL.

A very interesting Baseball tournament was held in November in the Men's Gymnasium. The games proved exciting to the spectators as well as to the players, and gave the latter some excellent practice for the next term's Inter-Class tournament. The schedule called for six games, between the following, more or less appropriately named, teams:—"Ayrshires", Capt. Ness. "Kerries", Baird. "Polled Angus", G. Ross. "Galloways", Summerby. "Holsteins", Sweet. "Jerseys", Smiley. "Shorthorns", Kennedy.

manager Mr. Cutler. The form showed by the men in this tournament lead us to expect an exceptionally good team to represent the College this winter.

The Inter-Class games are being held as usual this term and are creating the keenest interest. This series, which created much friendly rivalry last year, was won in 1910 by the present Seniors, who thus gained the beautiful bronze shield presented by Dr. Robertson. The schedule for 1911 calls for twelve games, and at the time of writing two of these have been played, the Seniors beating the Freshmen and the Juniors Beating the Sophomores.

THE RINK.

It was decided at a meeting of the M.C.A.A. at the beginning of the College year, to have a Rink as usual this Winter; and remembering the splendid work done last year by Mr. Baird, the meeting re-elected him unanimously to the position of Chairman of the Rink Committee. At a good deal of sacrifice to himself Mr. Baird accepted the position for the present season. The Committee elected was as follows:—

Chairman, W. Baird, '12.

Sec-Treas, C. M. Spencer, '11.

Committeemen:—L. C. Raymond, '12; W. Gibson, '13; A. Montgomery, '14.

The Management lost no time in getting the Rink started and were assisted by the boys on one or two occasions when preparing the enclosure for the ice. Weather conditions were favourable and ice was made in a very short time. The Rink was thrown open to the public on Dec. 13th, and has proved even more popular than last year.

In size it is slightly larger than last year and the condition of the ice has left nothing to be desired. The Rink

is electrically lighted through the courtesy of the Electrical Dept. of the College, and all together it makes an up-to-date Rink of which we are all proud. Its popularity increases as the season advances, and every afternoon and evening that it is open, it is thronged with enthusiastic skaters who are all agreed as to the health and pleasure to be gained from the pastime.

HOCKEY.

Macdonald is assured of the strongest Hockey team this year that has ever represented it; and it is a great pity that the weather has been so unfavorable as to prevent the playing, as yet, of any of the matches scheduled. Several new men will figure on the line up, and there will be keen competition for places on the First team. Mr. Barton will act as Manager and Alex. Ness as Captain. The numerous work-outs we have had since Christmas have shown the quality of the players, and as we are fortunate in having with us two men who have travelled with the best, we should have a successful season when the elements allow us to prove our merit.



A HOCKEY PRACTICE.



WHY MACDONALD LOST AT BASKET BALL.

Athletics in the Girls Residence.



IN no other college in Canada do athletics play a more important part in a girl's life than at Macdonald. The founders of the College fully realized the importance of Athletics among girls when they equipped their gymnasium so completely with the most modern apparatus.

The swimming tank has also been a source of great pleasure to the students, and, although now closed for the winter months, we are looking forward to the spring when it will be re-opened.

The rink is now the chief source of exercise and amusement. We are able to enjoy skating in the evenings as well as in the afternoons, owing to the popular change in the study hour, from 7.30-9.30 to 8-10. on request of the student body. Saturday morning is reserved for the girls' Hockey practice, and we hope to take advantage of the opportunity given us, although it is not probable that any team will be formed to play outsiders.

Owing to the large number of girls desiring to play indoor Baseball, it was found necessary to divide them into 5 teams, and, under the supervision of Mr. Cutler, as coach, to play a series of games.

Miss McCredie was made captain of team A.

Miss Soles of team B.

Miss Ratchford of team C.

Miss Stewart of team D.

Miss Pye of team E.

The result of the tournament is as follows:—

	won	lost
E.	2	0
A.	1	1
B.	1	1
C.	1	1
D.	0	2



SOME GIRL ATHLETES.

Careful record was made of each player during the games, and two teams of those with the best standing were chosen. These teams have been practising against one another since the tournament. The first team has not yet been chosen but a challenge has been received from the Old Macdonald Girls of Westmount for a game on February 4th. As the Old Macdonald Girls include most of last year's 1st team, an exciting game is expected.

The Basketball team, under Mr. Bates, has been very successful. The first game of the season was against the Old Macdonald Girls on Nov. 19th and resulted in a score of 30-11 in favour of our girls.

In the return match, the following Saturday, our girls were again victorious, the score being 26-21.

There was still another victory for Macdonald on Saturday, December 10th.

when they met the Aberdeen School Teachers and defeated them with a score of 33-18.

The long looked for game with the R. V. C. took place on January 14th, when the 1st and 2nd teams of Macdonald played the 1st and 2nd teams of R. V. C. in Montreal. There was great enthusiasm over the game, for neither Macdonald nor R. V. C. had met with defeat this season, and Macdonald had high hopes of winning back Dr. Todd's handsome Trophy. However, after a close and hard fought

battle the score ended 27-22 in favour of R. V. C.

The 2nd team was also defeated, the score being 37-1.

The following week, Jan. 21st, the R. V. C. played a return match here. Our girls were again defeated, the score being 28-20.

The 2nd team was, however, victorious. The game was close and exciting, the score being 14-13 in favour of Macdonald.

The trophy will remain with the R. V. C. another year, but we hope for better luck next time.



A PEACH PACKING DEMONSTRATION



THEN THEY WENT.

The gong sounded for study hour, and still they stayed. He asked them the time, but they failed to take the hint. He suggested that he was keeping them from their study, but oh! no, they didn't want to study. He smashed the electric light globe—they moved not. Exasperated beyond measure, he took down his violin, remembering that music has charms to soothe the savage breast. He struck a chord. That moved them. He started to sing, and there was a rush for the door. Then Newton sat down to his studies with a satisfied smile.

* * *

(Heard at the table after a'slam'.)—Miss F.—“Oh, why don't you box Cupid's ears?”

Miss C.—“I don't care to get splinters in my fingers.”

* * *

(In Bacteriology Lab.)—Baird—“Well, thank heaven, I am not an Englishman.”

Kennedy.—“You relieve my mind of one thing——”

Doc.—“Well, that's good, since it can't stand much.”

* * *

Pres. of Y. M. C. A.—“I tell you, you beastly ass, that horsh'es got sheven heads.”

Pres. of Res. Comm.—“You blashted liar, he'sh got, hic! elevensh.”

Buck.—“Yip hi addy—keep it, hic! going, fellows, I am shcorer.”

Book agent to one of last year's Agricultural students—“Mr. R., can't I interest you in 'ANOTHER MAN'S WIFE'?”

Mr. R.—“No, sir, I have my own troubles already.”

* * *

Freshman.—(In Montreal Hotel)—“Why the deuce did you tip that waiter so much?”

Macfarlane, '12—“Look at the coat he gave me!”

* * *

Joke Editor.—“Here's a correspondent who wants to know how long girls should be courted?”

Editor.—“Tell him, just the same as short girls.”

Joke Editor.—“Well, how's that?”

Editor.—“Oh, you should know; if you don't, ask Westgate.”

* * *

(After 11.30 p. m.)—She.—“And would you really put yourself out for my sake?”

He.—“Indeed, I would.”

She.—“Then do it, please, I'm awfully sleepy.”

* * *

Brown.—(Trying to get McClintock to smoke)—“Say, Mac, have you never tasted tobacco?”

McC.—“Well, yes, I've tasted the smell of it.”

* * *

Miss C.—(After M. C. Lit. Debate)—“Oh, Mr. Raymond, how well Mr. Lods talks. I could listen to him all night.”

Raymond.—“Well, I have to, worse luck.”

FROM THE EXAM. PAPERS.

English.—What are the chief prose works of the fifteenth century?

(Ans.)—The ballads and the sonnets.

Animal Husbandry?—Young oats should never be fed to green pigs.

Cereal Husbandry?—In a head of wheat we find—a colonel, two floury glooms and a rake off.

Biology?—Moist weather forms diseases of insects.

Mr. K.—(After passing bread, butter sugar, etc. to Miss C.)—"I beg your pardon?"

Miss C.—"I didn't say anything."

Mr. K.—"Oh, I am sorry, I thought you said 'thank you'."



NORMAL PRESSURE.]

Dr. B.—"Is it possible to produce energy out of nothing?"

Critchley.—"Yes, just strike me."

Gleaned from an Examination Paper:
Normal Pressure is that pressure which is most conducive to comfort.

HEALTH IN THE MEN'S RESIDENCE.

During the latter part of last term, in the month of December in particular, several members in Residence contracted various maladies; while scarcely dangerous, still some of them were quite serious. Ness' was a peculiar case, his so-called brain seemed to be affected. He had a Pain, was happy when he had the Pain, and when he had no Pain, he was in agony. He became quite "fussy" about Pain, and still, although somewhat improved, thinks and dreams about that exceptionally pleasant Pain.

Browne's was a more serious case; various and conflicting reports were circulated about him, and his friends were quite sympathetic when it was reported at the time of the reception—Dec. 9th—that Browne had water on the knee. But Browne didn't appreciate their sympathy, he became profane and got quite surly. It's no use sympathising with a man like Browne. That is why we do not extend our sympathy to him now, though at present the poor fellow has a complication of blood poisoning. But, as we said before, it is no good offering him our condolences, he would only shock the poor Joke Editor's religious feelings, so we leave him to himself in his room and his stained Gym. shoes.

Another case was that of Kennedy. During the Christmas holidays his brain was affected, he had no control at all over what he said, and couldn't even say nasty things to the girls, which was indeed a most alarming symptom. But, worse than that, he even seemed to delight in their company, said nice things, and paid compliments to all his friends. Things were getting serious and he was going to be sent away to a lunatic asylum, when he sud-

denly recovered and now is apparently as healthy and nasty as ever.

These are not the only cases. L. C. McOuat was really quite ill, but a receipt from the Residence across the Campus effected a complete cure.

Lack of space prevents us from referring to a couple of cases in the Freshman year.

* * *

CONUNDRUMS.

When does a Household Science girl in the "Apartments" resemble a cat chasing its tail?

(Ans.)—When trying to make both ends meet.

Prof.—What animal is satisfied with the least nourishment?

(Ans.)—Sci. '11—The moth. It eats holes.

* * *

SHE HAD NEVER BEEN TO MACDONALD.

He.—"Have you noticed, my dear, that there is not any cream on this milk?"

She.—"Yes, and I spoke to the milkman about it this morning; he said that the company filled the bottles so full that there was no room for the cream to rise."

* * *

Father.—"Young man, do you realize that your college career has cost me \$10,000?"

Son.—"Well, Dad, it was worth it."

* * *

(Heard at an argument about transmigration of the soul)—Miss McM.—"Well now, Mr. Logan, if you were to die now, where do you think your soul would go to?"

Logan—(startled)—"Why—er—I don't really know."

"Smick"—"Well, I do."

AT DAOUST'S

Teacher.—“I'd like to get a pair of pincers.”

Shop walker.—“Shoe department, up stairs, please, Madam.”

* * *

Short Course Man—(in the middle of the Main Building corridor, to Macfarlane)—“Plaze, Sir, is this Macdonald College?”

Durost.—(at exam.)—“What is Mr. Swaine going to do with that high power microscope?”

Campbell.—“He will use it when looking for sense in your exam. paper.”

* * *

(In Household Accounts) — Miss R.—“Miss H., how did you do that 'sum?”

Miss H.—“With my head.”

Miss R.—“I didn't ask what instrument you used.”



AN ICY INTRODUCTION.

I introduced them on the ice;
He attempted to be nice,
And started out to make a lovely bow;
But he slipped and down he fell,
He said “Tut,” and I said “Deary, deary me,”
And she doesn't speak to either of us now.

Mr. E.—“What do you think of this purple colour?”

Miss P.—“I think it is hideous.”

Mr. E.—“Well now, we all know your opinion of the freshmen.”

Teacher.—(In Day School)—“The wise men from the East brought gold to the Babe in the manger.”

Neil.—“Well, I think that was very foolish, why didn't they bring candy?”



AN ALUMNA.

"Madam," said the tramp, "take back your bread. I return it unbroken."

"What's the matter with it, my man?"

"It brings back sad recollections, madam, I can't touch it."

"Does it remind you of the bread your mother used to make?" she asked gently.

"No, madam, it doesn't; it makes me think of the time when I was breaking stones at Portland."

* * *

Scottie—(to McC.)—"If the earth belonged to us, d'ye know the first thing we'd dae? We'd sink yon wee island ye cam frae; we'd drap ye beneath the water."

McClintock.—"Indade, then that 'ud be the first thing yez ever dropped after ye got your paws on it."



ODE TO THE CALCID FLY.

Note.—The Calcid fly lays its eggs beneath the skin of a caterpillar, where the young hatch, feed, and the metamorphosis takes place.

Oh, Calcid Fly! Oh, Calcid Fly!
 How could you be so cruel?
 To fill that poor thing full of eggs,
 You broke the "Golden Rule."
 Your larvae fed on its inside,
 Their pupae on its back do ride,
 In vain the poor thing sought to hide
 Above, below, or on the side,
 In vain was any earthly guide,
 Its comrades fled to far and wide,
 As on to it you swift did glide,
 With purpose fell, and deadly stride.
 Oh better far that it had died,
 E'er slowly its life blood was dried;
 And shrunk, its green and silky hide.
 You ought to be ashamed in truth
 For having shown so little ruth.
 A caterpillar, too, can feel,
 E'en though you cannot hear it squeal,
 You shouldn't harm a single feature
 Of such an inoffensive creature.

JUST THINK, WHAT IF—

—The students came in to breakfast on time.

—Dr. S. should fail to smile.

—The girls should hold another reception.

—Prof. K. should be seen with his tie awry.

—Someone should send in some jokes to the magazine editors.

THE POPULAR PLAN.

Said the teacher: "I am tired of this endless daily grind, And ere long the crowded schoolroom I will leave far, far behind.

When I'll hie me to the country where birds and flowers charm,

And make an easy living on a little chicken farm."

Quoth the poet: "Ah, indeed, this is a callous world, For my very best effusions in the waste-basket are hurled. So I'll hasten to the country and hide me from all harm In the peace and sweet seclusion of a little chicken farm."

Said the business man: "I've laboured for years almost two score,

And watched with satisfaction my slowly growing store. I've enough: and in the country far beyond the ticker's charm

I'll keep from growing rusty managing a chicken farm."

Quoth the soldier: "I am weary of serving bloody Mars, And the endless round of routine on my strained nerves rudely jars.

So I'll settle in the country and safe from war's alarm, Will live in calm contentment on my little chicken farm."

Yes, one and all agree that the chicken farm's the place To calm the troubled nerves and put a smile upon the face.

Let us hope that poets, soldiers, business men and sweet school-marms

Will soon be living happy on their model chicken farms.

F. H. S.

A Test Tube Tragedy.



HAVE lived here at Macdonald College since my sporehood, and was born and brought up in a stable milk pail.

Life down in the old milk place was too good to last, and when I was a strapping Bacillus nearly a micron long, a series of tremendous milk-quakes occurred, and when we came to ourselves we were in a new world. It was the most disgusting place I have ever seen. The atmosphere was strongly Dairobic. It was swamped with reeking sunlight. There was none of the delicious, life-giving aroma of the stables. Not for love or money could we obtain any of "The Dirt that makes Hearts light". The vilest slums of our old home could not have been cleaner than was this new place.

Early and late I worked for a living. Often Mother and I dined off a mere crust of dirt; but that crust was sancti-

fied by the purest of all loves—the love of a Mother for her spore and of a spore for his Mother.

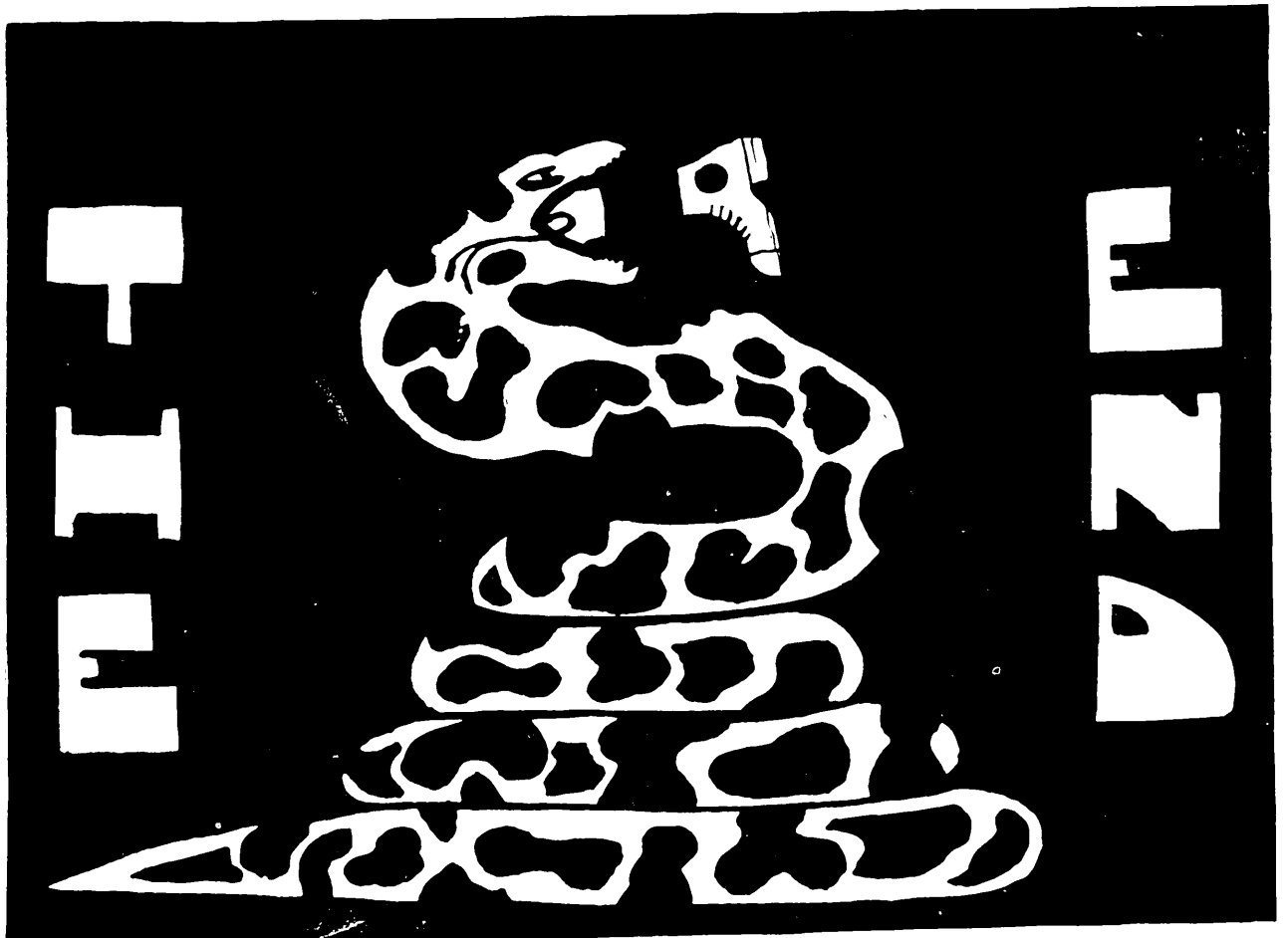
It was now that I first met Teeby—afterwards my wife. The class room had just been sterilised of a class of Agriculturani Studenti, and the Presiding Genius had inoculated with some Cincha Domestica. I was resting quietly in a bottle which one of the Domestica was trying to pasteurize, having learnt by experience how harmless the result would be; and there I first saw Teeby. She was dressed in a simple but fashionable cell wall and beneath its hem peeped out two dainty, neatly shod little flagellae. Her vili were black and piled, crown-like, on top of her head. She was simply ravishing. To cut a long story short I married her, and for some time we lived happily enough. But one day an old College chum of mine—a fellow that I had once thought my friend,

by name Prodige. I. Osus, came to spend a few days with us. Teeby evidently became infatuated with the rascal's red coat and swaggering military air. One day I discovered a letter from Osus making arrangements for an elopement. I was like one demented. I gnashed my granules and tore my vili. My protoplasm boiled in my veins. I met the villain, an awful duel ensued, and though wounded sore and oozing protoplasm from innumerable hurts I killed him in the end. The affair was too much for my dear Mother who soon afterwards died of a broken nucleus.

In my despair I hurled myself into a bowl of Dough Domestica, hoping

to be burnt or desiccated to death. But that happy release was denied me and somehow that dough became a cake and passed into the hands of a Facultative human. Again I hoped for death, this from hot air or mastication, and again I was disappointed. The human could not masticate the cake and I was hurled forth through a window.

For long have I dwelt in this abode, safe but not happy. The rain, the sun, the frost, the snow have no effect on my home and, unlike my wife, it will never fail me. Oh Teeby! Oh Teeby! If thou hadst been faithful then indeed would this life have been a veritable Gelatin Tube on earth.



Canadian Books for Canadians!

THESE 5 CANADIAN BOOKS, BY CANADIAN AUTHORS, WILL BE WEL-
COMED BY LOVERS OF CANADIAN LITERATURE.

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"Sowing Seeds in Danny" and "The Second Chance" are books which touch the heart strings.

The Frontiersman.

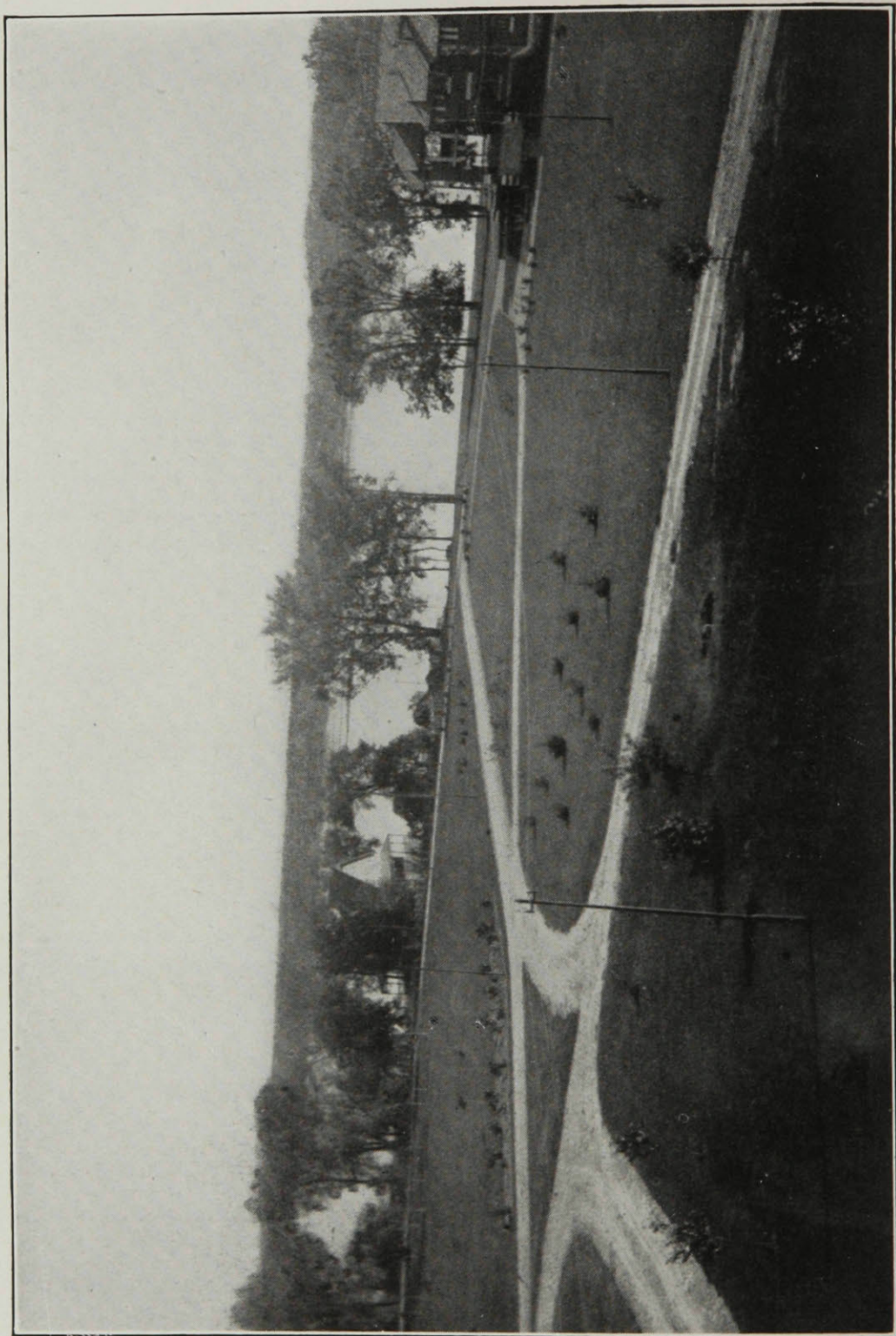
A Tale of the Yukon.

By H. A. CODY

CLOTH, \$1.25

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William Briggs, Publisher, 29-37 Richmond Street West,
TORONTO, ONTARIO.
AND OF ALL BOOKSELLERS.



THE CAMPUS.

A Great Honour.



IT is the almost unique privilege of the Editors of the Macdonald College Magazine to publish in this number, letters from three of the most eminent British statesmen—from those three members of the British Government whose messages should have the most peculiar interest to this College, standing as it does for the advancement of learning, the improvement of Agriculture and the upbuilding of the Empire.

With the exception of some personal messages which the Editor will always treasure, we are publishing these letters in full and allowing them to speak for themselves. Those who know the responsibilities of these gentlemen will realize the value of their messages.

The first is from Walter Runciman, the man who is responsible for the direction of the Educational policy of the forty-five million inhabitants of Great Britain.

WHITEHALL, LONDON, S.W.

My dear Sir,

At a time when all kinds of practical, and especially agricultural, education are occupying the most earnest attention of the Board of Education of the Mother Country, we watch with deep interest and sympathy the development of the Macdonald College. Thanks to the generosity of your founder you have a great opportunity of which we know that you are taking advantage. The Old Country hopes to learn much from your experience and will always be glad to place the results of her own at your disposal. We believe that the interchange of ideas based on practical experience between the educational institutions of the Mother Country and the Colonies will afford an invaluable contribution to the vital resources of the Empire.

Yours faithfully,

WALTER RUNCIMAN,
President of the Board of Education.

Lord Carrington, in whose hands lies the welfare of British agriculture, writes as follows:—

It gives me very much pleasure to accept the hospitality of the columns of the Macdonald College Magazine to send a message of greeting to the agricultural students of the Province of Quebec, and through them to the whole agricultural community of Canada. As the Minister who is responsible for the interests of Agriculture in the Old Country I have watched with the greatest pleasure and pride the progress made in the development of the agricultural resources of the Dominion. The rapid increase of our population at home makes us increasingly dependent on you for the food supply of our people, and the efforts which are being made by your Government in promoting agricultural education and scientific research are therefore of material importance to us.

We, here, are following your good example, and in recent years Parliament has paid increasing attention to measures designed with the object of helping what is still the greatest industry of the country. After a period of acute depression lasting from 1879 to 1893 agriculture has made a wonderful recovery, and at the present time the industry is in a flourishing and satisfactory condition. The scientific discoveries of Lawes and Gilbert at Rothamsted have been popularised and spread abroad by the establishment of Agricultural Colleges all over the country, the work of the various societies for the improvement of live stock has developed an export trade in high class pedigree stock to all parts of the world, the Board of Agriculture has succeeded in stamping out almost all the serious diseases of animals, the Government has established a Fund from which £250,000 (\$1,250,000) a year is set aside for agricultural development, farmers have been given greater security of tenure, labourers have the opportunity of obtaining small holdings under State

auspices, and proposals are now being formulated to establish a system of agricultural credit on a co-operative basis.

I am sure that the agriculturists of Canada, so many of whom were born and bred here, will be glad to know that the Old Country is alive to the importance of fostering agriculture, and that the Government is doing all that it can to increase the productiveness of the land and to promote the prosperity of its cultivators.

CARRINGTON,

President of the Board of Agriculture.

Lastly we print the message of the Secretary of State for the Colonies, whose difficult duty it is to promote the well-being and unity of this great and unique Empire of ours.

Downing Street.

Dear Mr. Kennedy,

I send with pleasure a message of hearty good wishes to the College, to the Magazine and to its Editor.

I wish well to the College for three reasons,—because it gives training for agriculture in which Canada bids fair to lead the world; because, in addition to its own merits, it is linked to the great McGill University which has done and is doing so much for Canada; most of

all, because of the patriotism and generosity of the Canadian citizen, to whom the College owes its existence and its name, and who is not alone among Scotch Canadians in having paid with interest his debt to Canada.

I wish well to the Magazine for two reasons; because in a new and fast-developing land it is, in my opinion, all important for the young men who have the keeping of the future to be given facilities for reading, writing and thinking deeply and seriously, as opposed to reading and thinking in headlines; further, because Canada has now a literary standard of which we are all proud and to which the Magazine will, I hope, live up.

Lastly, I wish well to the Editor. His lot is fallen in a fair place. May he be a happy and successful subject of the King and citizen of Canada.

Yours very sincerely,

L. HARCOURT.

Words like these from across the Atlantic Ocean, and from the men in the Old Country who are the pillars upholding the ideals to which Macdonald College is endeavouring to attain, should be a stimulus to it and to us, for each one of us stands for Macdonald College. The eyes of the world are upon it,—and us.
